Statement of Basis

Permit to Construct P-2018.0006
Project No. 62025

Classic Truck Collision Center

Idaho Falls, Idaho

Facility ID No. 019-00094

Final

November 9, 2018
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The purpose of this Statement of Basis is to satisfy the requirements of IDAPA 58.01.01.et seq, Rules for the Control of Air Pollution in Idaho, for issuing air permits.

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ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

AQCR	Air Quality Control Region
Btu	British thermal units
CAS No.	Chemical Abstracts Service registry number
CE	Control Efficiency
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Department of Environmental Quality
EL	screening emission levels
EPA	U.S. Environmental Protection Agency
gal/day	gallons per calendar day
gal/hr	gallons per hour
gal/yr	gallons per consecutive 12 calendar month period
gr	grain (1 lb = 7,000 grains)
HAP	hazardous air pollutants
hr/yr	hours per year
HVLP	high volume, low pressure (applies to paint guns)
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
lb/gal	pounds per gallon
lb/hr	pounds per hour
LPG	Liquefied Petroleum Gas
MMBtu	million British thermal units
NAICS	North American Industry Classification System
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_2	nitrogen dioxide
NO_x	nitrogen oxides
NSPS	New Source Performance Standards
PC	permit condition
$PM_{2.5}$	particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
ppm	parts per million
PTC	permit to construct
PTE	potential to emit
Rules	Rules for the Control of Air Pollution in Idaho
scf	standard cubic feet
SDS	Safety Data Sheet
SIC	Standard Industrial Classification
SM80	synthetic minor facility with emissions greater than or equal to 80% of a major source threshold
SO_2	sulfur dioxide
SO_X	sulfur oxides
T/yr	tons per consecutive 12-calendar month period
T2	Tier II operating permit
TAP	toxic air pollutants
TE	Transfer Efficiency
UTM	Universal Transverse Mercator
VOC	volatile organic compounds

FACILITY INFORMATION

Description

Classic Truck Collision Center is an auto body repair and refinishing facility with a sand blasting or abrasive blasting operation and a paint spray booth. The paint booth is a pressurized downdraft booth with filters for control of particulate emissions. Drying and paint curing are done in the paint booth. The booth is equipped with a natural gas-fired heater to heat the paint booth. The process includes application of coatings via two high volume, low pressure (HVLP) or equivalent paint guns. In this case "or equivalent" means a paint gun that has a minimum 65% transfer efficiency as documented by the spray gun manufacturer.

Permitting History

This is an initial PTC for the existing facility constructed without a permit, thus there is no permitting history. According to the registration information from Better Business Bureau, the business started on September 10, 2007.

Application Scope

This is the initial PTC for an existing facility that was purchased in April 2014.

Application Chronology

January 22, 2018	DEQ received an application.
January 23, 2018	DEQ received an application fee and partial processing fee (i.e., $500).
March 20 – April 4, 2018	DEQ provided an opportunity to request a public comment period on the application and proposed permitting action.
March 21 & April 12, 2018	DEQ determined that the application was incomplete.
March 27, May 2, May 15, July 3, & July 9, 2018	DEQ received supplemental information from the applicant.
May 31, 2018	DEQ determined that the application was complete.
July 16, 2018	DEQ made available the draft permit and statement of basis for peer review.
July 23, 2018	DEQ made available the draft permit and statement of basis for Applicant review.
August 14 – September 13, 2018	DEQ provided a public comment period on the proposed action.
September 11 and October 19, 2018	DEQ received the permit processing fee.
November 9, 2018	DEQ issued the final permit and statement of basis.

TECHNICAL ANALYSIS

The facility uses sand blasting or abrasive blasting to remove old coating from an auto body. Sand blasting or abrasive blasting is performed in a sealed garage with no vents. The facility utilizes dry fiber filtration media for control of particulate matter emissions from the automotive coating operation. In addition, HVLP paint guns (or equivalent) are used to minimize particulate matter emissions from painting. The HVLP (or equivalent) spray equipment will control particulate matter emissions by having more paint transfer to the desired surfaces than traditional painting equipment.

Emissions Units and Control Devices

Table 1 EMISSIONS UNIT AND CONTROL DEVICE INFORMATION

ID No.	Source Description	Control Equipment Description	Emissions Point ID No. and Description
Abrasive Blasting	Sand blasting (abrasive blasting): Manufacturer: Clemco Model: 2452 Manufacture date: NA Maximum capacity (bin size): 600 lb Permitted sandblaster media usage : 325,000 lb/yr	Sealed garage with no vents	No vents
Automotive Coating Operation	Paint spray booth: Manufacturer(s): Global Finishing Systems or equivalent Model(s): DDW-1616.5-PDT-76-BB-SC-HT-CUR-S or equivalent Paint booth heater: Manufacturer: Global Finishing Solutions or equivalent Model(s): MIDCO Heat input capacity: 3.2832 MMBtu/hr Fuel: natural gas	Paint spray booth and/or preparation station filter system: Booth type(s): down draft Particulate filtration method: dry filters Filter manufacturer(s):Paint Pocekts Green or equivalent Model(s): PPG-048-060-001 or equivalent PM/PM_{10} control efficiency: 98% or greater Coating spray guns: Manufacturer: Anest Iwata or equivalent Model: LS400 or equivalent Type: HVLP or equivalent Transfer efficiency: 65% or greater Manufacturer: Anest Iwata or equivalent Model: LPH400 or equivalent Type: HVLP or equivalent Transfer efficiency: 65% or greater	Paint booth exhaust stack

Emissions Inventories

Potential to Emit

IDAPA 58.01.01.006 defines Potential to Emit (PTE) as the maximum capacity of a facility or stationary source to emit an air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is state or federally enforceable. Secondary emissions do not count in determining the potential to emit of a facility or stationary source.

Using this definition of Potential to Emit, an emission inventory was developed for the sand blasting (abrasive blasting) operation and automotive coating operation associated with this existing facility by the applicant and reviewed by DEQ staff (see Appendix A for detailed potential to emit calculations). The PTE of criteria pollutants and hazardous air pollutants (HAP) were based on the worst-case VOC, particulate matter, and HAPs content for coatings that are taken from the DEQ Automotive Coating EI spreadsheet (see the DEQ website) and based on using the black diamond blasting media as provided by the applicant.

Uncontrolled Potential to Emit

Using the definition of Potential to Emit, uncontrolled Potential to Emit is then defined as the maximum capacity of a facility or stationary source to emit an air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall **not** be treated as part of its design **since** the limitation or the effect it would have on emissions **is not** state or federally enforceable.

The uncontrolled Potential to Emit is used to determine if a facility is a "Synthetic Minor" source of emissions. Synthetic Minor sources are facilities that have an uncontrolled Potential to Emit for criteria pollutants or HAPs above the applicable Major Source threshold without permit limits.

The following table presents the uncontrolled Potential to Emit for criteria pollutants as submitted by the applicant and reviewed by DEQ staff. See Appendix A for a detailed presentation of the calculations and the assumptions used to determine emissions for each emissions unit. For automotive coating operation uncontrolled Potential to Emit is based upon a worst-case for operation of the facility of 2,080 hrs/yr (8 hrs/day x 260 days/yr) with all coating operations occurring during this time. Since there is prep time (the time spent preparing the automobile for the application of coating) and paint drying time (the time the automobile spends in the booth with the burner operating to facilitate hardening of the coating) associated with applying coatings, this was considered to be the worst-case maximum for which emissions would occur. For sand blasting (abrasive blasting) operation, uncontrolled Potential to Emit is based upon zero control and 8,760 operating hours per year.

Table 2 UNCONTROLLED POTENTIAL TO EMIT FOR CRITERIA POLLUTANTS

Emissions Unit	$PM_{2.5}$	PM_{10}	SO_2	NO_x	CO	VOC	Lead
	T/yr	T/yr	T/yr	T/yr	T/yr	T/yr	lb/quarter
Point Sources							
Paint spray booth(s) and/or preparation station(s)	3.74	3.74	0.0	0.0	0.0	12.24	0.0
Abrasive Blasting	1.19	11.86	--	--	--	--	--
Paint booth heater	0.026	0.026	0.01	0.59	0.29	0.02	0.0060
Total, Point Sources	**4.96**	**15.63**	**0.01**	**0.59**	**0.29**	**12.26**	**0.01**

The following table presents the uncontrolled Potential to Emit for HAP pollutants as submitted by the applicant and reviewed by DEQ staff. The table only lists those individual HAPs that are emitted in the greatest quantities; see Appendix A for a complete listing of all HAPs emitted. For automotive coating operation uncontrolled HAP emissions were calculated by using the DEQ Automotive Coating EI spreadsheet (see the DEQ website) and setting paint use to 4.0 gallons per day (as limited by the permit). Then, the worst-case maximum HAPs Potential to Emit was determined for all paints listed in the spreadsheet. As discussed previously, HAP emissions were assumed to occur during the worst-case for operation of the facility of 2,080 hrs/yr. For sand blasting (abrasive blasting) operation, uncontrolled Potential to Emit is based upon zero control and 8,760 operating hours per year.

Table 3 UNCONTROLLED POTENTIAL TO EMIT FOR HAPs[a)]

HAP Pollutants	PTE (T/yr)
Ethyl benzene	0.61
Methyl Isobutyl Ketone (MIBK)	1.26
Naphthalene	2.34
Toluene	1.92
Styrene	2.51
Xylene (o-, m-, p-isomers)	2.22
Total	**10.87**

a) The table does not list all individual HAPs, however the total PTE value reflects all HAPs.

Pre-Project Potential to Emit

Pre-project Potential to Emit is used to establish the change in emissions at a facility as a result of this project.

This is an existing facility. However, since this is the first time the facility is receiving a permit, pre-project emissions are set to zero for all criteria pollutants.

Post Project Potential to Emit

Post project Potential to Emit is used to establish the change in emissions at a facility and to determine the facility's classification as a result of this project. Post project Potential to Emit includes all permit limits resulting from this project.

The following table presents the post project Potential to Emit for criteria pollutants from all emissions units at the facility as provided by the applicant and reviewed by DEQ staff. See Appendix A for a detailed presentation of the calculations of these emissions for each emissions unit.

Table 4 POST PROJECT POTENTIAL TO EMIT FOR CRITERIA POLLUTANTS

Emissions Unit	$PM_{2.5}$ T/yr[a]	PM_{10} T/yr[a]	SO_2 T/yr[a]	NO_x T/yr[a]	CO T/yr[a]	VOC T/yr[a]	Lead T/yr[a]
Point Sources							
Paint spray booth(s) and/or preparation station(s)	0.07	0.07	0.00	0.00	0.00	12.24	0
Abrasive Blasting	0.11	1.06	---	---	---	---	---
Paint booth heater	0.03	0.03	0.01	0.59	0.29	0.02	0.000003
Post-Project Totals	**0.21**	**1.16**	**0.01**	**0.59**	**0.29**	**12.26**	**0.000003**

a) Controlled average emission rate in tons per year is an annual average, based on the proposed annual operating schedule and annual limits.

The following table presents the post project Potential to Emit for HAP pollutants from all emissions units at the facility as provided by the applicant and reviewed by DEQ staff. The table only lists those individual HAPs that are emitted in the greatest quantities; see Appendix A for a complete listing of all HAPs.

Table 5 POST PROJECT POTENTIAL TO EMIT FOR HAPs[a)]

HAP Pollutants	PTE (T/yr)
Ethyl benzene	0.61
Methyl Isobutyl Ketone (MIBK)	1.26
Naphthalene	2.34
Toluene	1.92
Styrene	2.51
Xylene (o-, m-, p-isomers)	2.22
Total	**10.87**

a) The table does not list all individual HAPs, however the total PTE value reflects all HAPs.

Change in Potential to Emit

The project's change in Potential to Emit is used to determine if a public comment period may be required or if emissions modeling may be required and to determine the processing fee per IDAPA 58.01.01.225.

The following table presents the change in the Potential to Emit for criteria pollutants as a result of this project.

Table 6 CHANGES IN POTENTIAL TO EMIT FOR CRITERIA POLLUTANTS

Emissions Unit	$PM_{2.5}$ T/yr	PM_{10} T/yr	SO_2 T/yr	NO_x T/yr	CO T/yr	VOC T/yr	Lead T/yr
Pre-Project Potential to Emit	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Post Project Potential to Emit	0.21	1.16	0.01	0.59	0.29	12.26	0.000003
Post-Project Totals	**0.21**	**1.16**	**0.01**	**0.59**	**0.29**	**12.26**	**0.000003**

Non-Carcinogenic and Carcinogenic TAP Potential to Emit

The applicant has requested to use Automotive Coating "General Permit" spreadsheet for their coating operation. With the limits in that spreadsheet, the abrasive blasting media usage limit, and the control requirements in the

permit, no TAP emissions exceed an emissions screen levels (EL) specified in IDAPA 58.01.01.585 or 586; therefore modeling for TAP is not required. (Refer to Appendix A for details).

Ambient Air Quality Impact Analyses

Besides TAP, it needs to be determined if the PTE for the abrasive blasting operation and automotive coating operation exceed the DEQ modeling guideline thresholds for criteria pollutants. The following table compares the post-project facility-wide annual emissions to the DEQ modeling guideline thresholds (per the State of Idaho Air Quality Modeling Guideline, September 2013).

Table 7 PTE FOR CRITERIA POLLUTANTS COMPARED TO THE DEQ MODELING GUIDELINE THRESHOLDS

Pollutant	PTE (T/yr)	DEQ Modeling Guideline Thresholds (T/yr)	Exceeds Modeling Guideline Threshold?
PM_{10}	1.16	1.5	No
$PM_{2.5}$	0.21	1.0	No
SO_2	0.01	4.0	No
NO_x	0.59	4.0	No
CO	0.29	10.0	No
Lead	0.00	0.06	No

All emissions are below the modeling thresholds; therefore, the facility does not require criteria pollutant modeling.

As discussed previously under Non-Carcinogenic and Carcinogenic TAP Potential to Emit section, no TAP emissions exceed the respective ELs in IDAPA 58.01.01.585 and .586. Therefore, the facility does not require TAP modeling.

REGULATORY ANALYSIS

Attainment Designation (40 CFR 81.313)

Classic Truck Collision Center is located in Bonneville County, which is designated as attainment or unclassifiable for $PM_{2.5}$, PM_{10}, SO_2, NO_2, CO, and Ozone. Refer to 40 CFR 81.313 for additional information.

Facility Classification AIRS/AFS

As demonstrated in Table 2, the facility has an uncontrolled potential to emit for $PM_{2.5}$, PM_{10}, SO_2, NO_x, CO, and VOC emissions less than the Major Source thresholds of 100 T/yr for each pollutant. In addition, as demonstrated in Table 3, the facility has an uncontrolled potential for each HAP less than the Major Source threshold of 10 T/yr and for all HAPs combined less than the Major Source threshold of 25 T/yr. Therefore, this facility is classified as a natural minor source and is classified as a "B" source.

PTC Permit to Construct (IDAPA 58.01.01.201)

IDAPA 58.01.01.201 Permit to Construct Required

The PTC rules under IDAPA 58.01.01.201 require that "No owner or operator may commence construction or modification of any stationary source, facility, major facility, or major modification without first obtaining a permit to construct from the Department which satisfies the requirements of Sections 200 through 228 unless the source is exempted in any of Sections 220 through 223." Therefore, DEQ staff analyzed the data from the permit application for the automotive coating operation and abrasive blasting operation to determine if it is exempt from obtaining a PTC according to Sections 220 through 223.

IDAPA 58.01.01.220 General Exemption Criteria for Permit to Construct Exemptions

In accordance with IDAPA 58.01.01.220.01.a, the maximum capacity of the source to emit an air pollutant under its physical and operational design without consideration of limitations on emissions such as air pollution control equipment, restrictions on hours of operation and restrictions on the type and amount of material combusted, stored, or processed shall not equal or exceed 100 tons/yr for all regulated air pollutants. As previously presented in Table 2, the proposed project results in uncontrolled potential emissions of less than 100 tons/yr for all regulated air pollutants. Therefore, the project meets the criteria set forth in Section 220 and may be exempt from PTC requirements. In addition, the criteria set forth in Section 221, 222, or 223 must be met to be exempt from PTC requirements.

IDAPA 58.01.01.221 Category I Exemption Criteria

In accordance with IDAPA 58.01.01.221.01, the maximum capacity of a source to emit an air pollutant under its physical and operational design considering limitations on emissions such as air pollution control equipment, restrictions on hours of operation and restrictions on the type and amount of material combusted, stored or processed shall be less than ten percent (10%) of the significant emission rates set out in the definition of significant at Section 006. The following table compares the post-project facility-wide annual PTE to 10% of the significance threshold listed in IDAPA 58.01.01.006 in order to determine if the project may qualify for a Category I exemption.

Table 8 PTE FOR CRITERIA POLLUTANTS COMPARED TO THE SIGNIFICANCE THRESHOLDS

Pollutant	PTE (T/yr)	10% of the Significance Threshold (T/yr)	Exceeds 10% of the Significance Threshold?
PM_{10}	1.16	1.5	No
$PM_{2.5}$	0.21	1.0	No
SO_2	0.01	4.0	No
NO_x	0.59	4.0	No
CO	0.29	10.0	No
VOC	12.26	4.0	Yes

The potential VOC emission rate of the proposed project is indicated in Table 8 above, which is above 10% of the significant emission rate listed in IDAPA 58.01.01.006. Therefore, the permitting of an existing automotive coating operation and sand blasting operation does not qualify for a Category I exemption.

Tier II Operating Permit (IDAPA 58.01.01.401)

IDAPA 58.01.01.401 Tier II Operating Permit

The application was submitted for a permit to construct (refer to the Permit to Construct section), and an optional Tier II operating permit has not been requested. Therefore, the procedures of IDAPA 58.01.01.400–410 were not applicable to this permitting action.

Visible Emissions (IDAPA 58.01.01.625)

IDAPA 58.01.01.625 Visible Emissions

The emissions from the automotive coating process are subject to the State of Idaho visible emissions standard of 20% opacity. This requirement is assured by Permit Condition 6.

Rules for the Control of Odors (IDAPA 58.01.01.775-776)

IDAPA 58.01.01.775-776 Rules for the Control of Odors

The facility is subject to the general restrictions for the control of odors from the facility. This requirement is

assured by Permit Conditions 7 and 14.

Title V Classification (IDAPA 58.01.01.300, 40 CFR Part 70)

IDAPA 58.01.01.301 Requirement to Obtain Tier I Operating Permit

IDAPA 58.01.01.006 defines a Tier I source as "Any source located at a major facility as defined in Section 008." IDAPA 58.01.01.008 defines a Major Facility as either:

- For HAPS a facility with the potential to emit ten (10) tons per year (T/yr) or more of any hazardous air pollutant, other than radionuclides, or
- The facility emits or has the potential to emit twenty-five (25) T/yr or more of any combination of any hazardous air pollutants, other than radionuclides.

Or, for non-attainment areas:

- The facility is located in a "serious" particulate matter (PM_{10}) nonattainment area and the facility has the potential to emit seventy (70) T/yr or more of PM_{10}, or
- The facility is located in a "serious" carbon monoxide nonattainment area in which stationary sources are significant contributors to carbon monoxide levels and the facility has the potential to emit fifty (50) T/yr or more of carbon monoxide, or
- The facility is located in an ozone transport region established pursuant to 42 U.S.C. Section 7511c and the facility has the potential to emit fifty (50) T/yr or more of volatile organic compounds, or
- The facility is located in an ozone nonattainment area and, depending upon the classification of the nonattainment area, the facility has the potential to emit the following amounts of volatile organic compounds or oxides of nitrogen; provided that oxides of nitrogen shall not be included if the facility has been identified in accordance with 42 U.S.C. Section 7411a(f)(1) or (2) if the area is "marginal" or "moderate," one hundred (100) T/yr or more, if the area is "serious," fifty (50) T/yr or more, if the area is "severe," twenty-five (25) T/yr or more, and if the area is "extreme," ten (10) T/yr or more.
- The facility emits or has the potential to emit one hundred (100) T/yr or more of any regulated air pollutant. The fugitive emissions shall not be considered in determining whether the facility is major unless the facility is a "Designated Facility":

Uncontrolled HAP emissions from automotive coating operation were calculated by using the DEQ Automotive Coating EI spreadsheet (see the DEQ website) and setting paint use to 4.0 gallons per day (as limited by the permit). Then worst-case HAP emissions were determined for all paints listed in the spreadsheet. Then emissions were assumed to occur 2,080 hours per year as a worst-case assumption. Uncontrolled HAP emissions from sand blasting are based on 8,760 operating hours per year without control.

As presented in Table 5, the PTE for each HAP is less than 10 T/yr, and the PTE for all HAPs combined is less than 25 T/yr. Therefore, this facility is not a HAPs Major Source subject to Tier I permitting requirements.

As discussed previously, Classic Truck Collision Center is located in Bonneville County (AQCR 61), which is designated as unclassifiable/attainment for $PM_{2.5}$, PM_{10}, SO_2, NO_x, CO, and Ozone for federal and state criteria air pollutants.

As presented in Table 4, the PTE for each criteria pollutant is less than 100 T/yr. Therefore, this facility is not a criteria pollutant Major Source subject to Tier I permitting requirements.

PSD Classification (40 CFR 52.21)

40 CFR 52.21 Prevention of Significant Deterioration of Air Quality

The facility is not a major stationary source as defined in 40 CFR 52.21(b)(1), nor is it undergoing any physical change at a stationary source, not otherwise qualifying under paragraph 40 CFR 52.21(b)(1) as a major stationary source, that would constitute a major stationary source by itself as defined in 40 CFR 52. Therefore, in accordance

with 40 CFR 52.21(a)(2), the PSD requirements do not apply.

NSPS Applicability (40 CFR 60)

The facility is not subject to any NSPS requirements.

NESHAP Applicability (40 CFR 61)

The facility is not subject to any NESHAP requirements in 40 CFR 61.

MACT/GACT Applicability (40 CFR 63)

40 CFR 63, Subpart HHHHHH **National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources**

§ 63.11169 What is the purpose of this subpart?

In accordance with §63.11169, subpart HHHHHH establishes national emission standards for hazardous air pollutants (HAP) for area sources involved in auto body refinishing operations that encompass motor vehicle and mobile equipment spray-applied surface coating operations.

§ 63.11170 Am I subject to this subpart?

In accordance with §63.11170(a), this automotive coating operation is subject to this subpart because the facility will be operated as an area source of HAP. The facility is a source of HAP that is not a major source of HAP, is not located at a major source, and is not part of a major source of HAP emissions. In addition, the facility will perform one or more activities listed in this section, including spray application of coatings, as defined in §63.11180, to motor vehicles and mobile equipment including operations that are located in stationary structures at fixed locations.

§ 63.11171 How do I know if my source is considered a new source or an existing source?

In accordance with §63.11171(b), the automotive coating operation is the collection of mixing rooms and equipment; spray booths, curing ovens, and associated equipment; spray guns and associated equipment; spray gun cleaning equipment; and equipment used for storage, handling, recovery, or recycling of cleaning solvent or waste paint. Paint stripping was not proposed as a business activity.

In accordance with §63.11171(c), this automotive coating operation is an existing source because it commenced construction prior to September 17, 2007, by installing new paint stripping or surface coating equipment, and the new surface coating equipment will be used at a source that was actively engaged in paint stripping and/or miscellaneous surface coating prior to September 17, 2007.

§ 63.11172 When do I have to comply with this subpart?

In accordance with §63.11172(a)(2), because the initial startup of the facility occurred prior to January 9, 2008, the compliance date is January 10, 2011.

§ 63.11173 What are my general requirements for complying with this subpart?

Because the facility has not proposed paint-stripping activities, the requirements of §63.11173(a) through (f) are not applicable. Because the facility is an automotive coating operation, in accordance with §63.11173(e), the permittee must meet the requirements of in paragraphs (e)(1) through (e)(5) of this section.

In accordance with §63.11173(f), each owner or operator of an affected automotive coating operation must ensure and certify that all new and existing personnel, including contract personnel, who spray apply surface coatings, as defined in §63.11180, are trained in the proper application of surface coatings as required by paragraph (e)(1) of this section. The training program must include, at a minimum, the items listed in paragraphs (f)(1) through (f)(3) of this section.

In accordance with §63.11173(g), as required by paragraph (e)(1) of this section, all new and existing personnel at an affected motor vehicle and mobile equipment or miscellaneous surface coating source, including contract

personnel, who spray apply surface coatings, as defined in §63.11180, must be trained by the dates specified in paragraphs (g)(1) and (2) of this section. Employees who transfer within a company to a position as a painter are subject to the same requirements as a new hire.

Compliance with these requirements is assured by permit condition 18.

§ 63.11174 What parts of the General Provisions apply to me?

In accordance with §63.11174(a), Table 1 of this subpart shows which parts of the General Provisions in subpart A apply. Compliance with these requirements is assured by permit condition 18.

In accordance with §63.11174(b), an owner or operator of an area source subject to this subpart is exempt from the obligation to obtain a permit under 40 CFR part 70 or 71 provided that a permit under 40 CFR 70.3(a) or 71.3(a) is not required for a reason other than becoming area source subject to this subpart. This permit application and permitting action involve a Permit to Construct, and will not utilize the requirements and procedures in IDAPA 58.01.01.300-399 for the issuance of Tier I operating permits.

§ 63.11175 What notifications must I submit?

In accordance with §63.11175(a), because the facility is a surface coating operation subject to this subpart, the initial notification required by §63.9(b) must be submitted. For this existing operation, the Initial Notification must be submitted no later than on or before March 11, 2011.

In accordance with §63.11175(b), because the facility is an existing source, the permittee is not required to submit a separate notification of compliance status in addition to the initial notification specified in paragraph (a) of this subpart provided the permittee was able to certify compliance on the date of the initial notification, as part of the initial notification, and the permittee's compliance status has not since changed. The permittee must submit a Notification of Compliance Status on or before March 11, 2011. The permittee is required to submit the information specified in paragraphs (b)(1) through (4) of this section with the Notification of Compliance Status.

Compliance with these requirements is assured by permit condition 20.

§ 63.11176 What reports must I submit?

In accordance with §63.11176(a), because the permittee is an owner or operator of a paint stripping, motor vehicle or mobile equipment, or miscellaneous surface coating affected source, the permittee is required to submit a report in each calendar year in which information previously submitted in either the initial notification required by §63.11175(a), Notification of Compliance, or a previous annual notification of changes report submitted under this paragraph, has changed. Deviations from the relevant requirements in §63.11173(a) through (d) or §63.11173(e) through (g) on the date of the report will be deemed to be a change. The annual notification of changes report must be submitted prior to March 1 of each calendar year when reportable changes have occurred and must include the information specified in paragraphs (a)(1) through (2) of this section.

Compliance with these requirements is assured by permit condition 21.

Because the facility has not proposed to conduct paint stripping operations, the MeCl minimization plan requirements are not applicable (see permit condition 10).

§ 63.11177 What records must I keep?

In accordance with §63.11177, because the permittee is the owner or operator of a surface coating operation, the permittee must keep the records specified in paragraphs (a) through (d) and (g) of this section. Because the permittee has not proposed to conduct paint stripping operations, the requirements of paragraphs (e) and (f) of this section are not applicable. Compliance with these requirements is assured by permit condition 19.

§ 63.11178 In what form and for how long must I keep my records?

In accordance with 40 CFR 63.11178(a) because the permittee is the owner or operator of an affected source, the permittee must maintain copies of the records specified in §63.11177 for a period of at least five years after the date of each record. Copies of records must be kept on site and in a printed or electronic form that is readily accessible for inspection for at least the first two years after their date, and may be kept off-site after that two year period. Compliance with these requirements is assured by permit condition 19.

§ 63.11179 Who implements and enforces this subpart?

In accordance with §63.11179(a), this subpart can be implemented and enforced by the U.S. Environmental Protection Agency (EPA), or a delegated authority. At the time of this permitting action, the EPA has not delegated authority to the State of Idaho. However, IDAPA 58.01.01.107.03.i incorporates by reference all Federal Clean Air Act requirements including 40 CFR 63, Subpart HHHHHH. Therefore, the requirements of this subpart have been placed in the permit.

§ 63.11180 What definitions do I need to know?

Terms used in this subpart are defined in accordance with §63.11180.

Permit Conditions Review

This section describes the permit conditions for this initial permit.

Permit condition 1 establishes the permit to construct scope.

Permit condition 2 provides the regulated sources – their process and controls.

Permit condition 3 provides a process description of the facility.

Permit condition 4 provides a description of the control devices used at the facility.

Permit condition 5 establishes hourly and annual emissions limits for $PM_{2.5}$, PM_{10} and VOC emissions from the automotive coating operation and sand blasting operation also called abrasive blasting operation.

Permit Condition 6 establishes a 20% opacity limit for the paint booth stacks, vents, or functionally equivalent openings associated with the automotive coating operation.

Permit Condition 7 establishes that the permittee shall not allow, suffer, cause, or permit the emission of odorous gasses, liquids, or solids to the atmosphere in such quantities as to cause air pollution.

Permit Condition 8 requires that abrasive blasting be operated in a sealed garage and establishes sandblaster's throughput limit. These requirements are for keeping the PM_{10} emissions below regulatory concern (BRC) level so that modeling would not be required. Permit Condition 8 specifies the blasting media type. The facility used Green Diamond blasting media before. Nickel emissions from using Green Diamond exceed nickel screening emission level (EL). The facility did not perform modeling analyses to further determine whether the facility would comply with nickel acceptable ambient concentration standard in the application. Therefore, Green Diamond blasting media is not allowed to use at the facility.

Permit Condition 9 establishes that only natural gas is allowed to be used as fuel in the paint booth heater as proposed by the applicant.

Permit condition 10 establishes that the facility will not use MeCl to remove paint from vehicles at the facility. This was done because MeCl was not proposed to be used at this facility by the Applicant and the emissions were not included in the DEQ Automotive Coating EI Spreadsheet (see the DEQ website). In addition, Subpart HHHHHH has additional requirements for facilities that use MeCl to remove paint as mentioned previously in the discussion of Subpart HHHHHH in the MACT Applicability Section.

Permit condition 11 establishes a daily use limit for all coating materials used in the automotive coating process as proposed by the Applicant. This limit was established because it was the easiest way for the Applicant to demonstrate compliance with the PM_{10} and VOC emissions limit specified in permit condition 5 and the TAPs emissions limits specified in the DEQ Automotive Coating EI Spreadsheet (see the DEQ website).

Permit condition 12 establishes that the permittee conduct all automotive coating operations in the paint booth or preparation station with the filters in place, exhaust fan(s) operating, and door(s) or curtain(s) closed, that the operation shall use a HVLP spray gun, and that the permittee shall maintain and operate the paint booth and preparation station exhaust filter system in accordance with the manufacturer's specifications. This condition also defines what a booth and preparation station used for applying coating is.

Permit Condition 13 requires the permittee to monitor the sandblaster throughput to demonstrate compliance with

the throughput limit of the sandblaster. Permit Condition 13 also requires for each alternate abrasive blasting media, the permittee shall keep the calculation required in Abrasive Blasting permit condition on site and make the records available to DEQ's representative upon request.

Permit condition 14 establishes that the permittee shall maintain records of all odor complaints received, perform appropriate corrective actions, and maintain records of corrective actions taken at the facility for the automotive coating process. This was required because automotive operation operations are expected to have odors that might be offensive to their immediate neighbors.

Permit condition 15 establishes that the permittee shall maintain material purchase records and Safety Data Sheets (SDSs) for the automotive coating process and for each blasting media used at the facility. This condition was placed in the permit to ensure compliance with the Coating Materials Use Limit Permit Condition and Abrasive Blasting permit condition.

Permit condition 16 establishes that the permittee shall maintain daily usage records of pre-treatment wash primer, primer, topcoat, clear coat, and thinner/reducer materials used for the automotive coating process. This condition was placed in the permit to ensure compliance with the Coating Materials Use Limit permit condition.

Permit condition 17 establishes that the permittee shall maintain records as required by the General Provision recordkeeping requirements.

Permit condition 18 establishes parameters that will allow the facility to comply with the general operating requirements of 40 CFR 63, Subpart HHHHHH – MACT Standards and Management Practices for Paint Stripping and Miscellaneous Coating Operations unless the facility is exempt from HHHHHH.

Permit condition 19 establishes parameters that will allow the facility to comply with the monitoring and recordkeeping requirements of 40 CFR 63, Subpart HHHHHH – MACT Standards and Management Practices for Paint Stripping and Miscellaneous Coating Operations unless the facility is exempt from HHHHHH.

Permit condition 20 establishes parameters that will allow the facility to comply with the initial notification and reporting requirements of 40 CFR 63, Subpart HHHHHH – MACT Standards and Management Practices for Paint Stripping and Miscellaneous Coating Operations unless the facility is exempt from HHHHHH.

Permit condition 21 establishes parameters that will allow the facility to comply with the annual notification and reporting requirements of 40 CFR 63, Subpart HHHHHH – MACT Standards and Management Practices for Paint Stripping and Miscellaneous Coating Operations unless the facility is exempt from HHHHHH.

Permit condition 22 establishes that the federal requirements of 40 CFR Part 63 are incorporated by reference into the requirements of this permit per current DEQ guidance.

Permit Conditions 23 to 38 are general provisions taken from the current PTC template.

PUBLIC REVIEW

Public Comment Opportunity

An opportunity for public comment period on the application was provided in accordance with IDAPA 58.01.01.209.01.c. During this time, there were comments on the application and there was a request for a public comment period on DEQ's proposed action. Refer to the chronology for public comment opportunity dates.

Public Comment Period

A public comment period was made available to the public in accordance with IDAPA 58.01.01.209.01.c. During this time, comments were not submitted in response to DEQ's proposed action. Refer to the chronology for public comment period dates.

APPENDIX A – EMISSIONS INVENTORIES

(2018AAG1460)

Facility Data Input:

• Exempt?	No	
• Fuel type	natural gas	
• Heaters	single/maximum	
• Maximum gas-fired heater size	**3.28**	MMBtu/hr (total heat input of all gas-fired)
• Maximum oil-fired heater size	0.00	MMBtu/hr (total heat input of all oil-fired)
• Daily coating	**4.00**	gal/day
• Bed lining	No	
• Safety factor	1.20	(applied to TAP)
• Natural gas gross heating value	1,000	MMBtu/MMscf

General PTC Emission Inventories for Automotive Coating Operations

maximum emission estimates of all coatings analyzed and including booth heater emissions

Combined Emissions (Booth + Heater)	PM...(Tpy)	PM...(Tpy)
	9.4881	9.4881

Criteria Air Pollutants	Booth Emissions	Heater Emissions	Combined Emissions (Booth + Heater)	Sand Blasting Emissions	Booth Emissions	Heater Emissions	Sand Blasting Emissions	Combined Emissions	SRC Threshold		Below Threshold?
	lb/hr	lb/hr	lb/hr	lb/hr	Tpy	Tpy	Tpy	Tpy			
NO_x	0.001	0.199	0.589	---	0.00	0.18	0.00	0.56	4	Tpy	Yes
CO	0.000	0.276	0.276	---	0.00	0.25	0.00	0.25	10	Tpy	Yes
PM_{10}	0.0171	0.0250	0.0421	1.334	0.0749	0.0260	1.0892	1.1572	15	Tpy	Yes
$PM_{2.5}$	0.0171	0.0250	0.0421	0.134	0.0749	0.0260	0.1958	0.2086	5	Tpy	Yes
SO_2	0.000	0.001	0.002	---	0.00	0.01	0.00	0.01	4	Tpy	Yes
VOC	2.794	0.219	2.813	---	12.24	0.97	0.00	13.26	4	Tpy	No
Lead	0.E+00	0.E-06	0.E-06	---	0.E+00	0.E-06	0.E+00	0.E-06	0.60	Tpy	Yes
	lb/mo	lb/mo	lb/mo								
	0.000	0.002	0.002	---							
$PM_{2.5}$ / PM_{10} (uncontrolled)	0.8930	0.0263	0.6800	0.27	3.7448	0.03	0.21	3.9822			
				2.71			2.11				

Hazardous Air Pollutants (HAP) and Toxic Air Pollutants (TAP)	Booth Emissions	Heater Emissions	Sand Blasting	Combined Emissions	Combined Emissions	Modeling Threshold	Below Threshold?
	lb/hr	lb/hr	lb/hr	lb/hr	Tpy	EL (lb/hr)	
Organic HAP PAH							
2-Methylnaphthalene	0.00E+00	1.87E-06		1.87E-06	1.95E-06	9.72E-05	Yes
3-Methylcholanthrene	0.00E+00	1.40E-09		1.40E-09	1.46E-09	2.08E-04	Yes
Acenaphthene	0.00E+00	1.40E-09		1.40E-09	1.46E-09	9.72E-05	Yes
Acenaphthylene	0.00E+00	1.40E-09		1.40E-09	1.46E-09	9.72E-05	Yes
Anthracene	0.00E+00	1.87E-09		1.87E-09	1.95E-09	9.72E-05	Yes
Benz(a)anthracene	0.00E+00	1.40E-09		1.40E-09	1.46E-09	9.72E-05	See PDW
Benzo(a)pyrene	0.00E+00	9.35E-10		9.35E-10	9.72E-10	2.08E-04	See PDW
Benzo(b)fluoranthene	0.00E+00	1.40E-09		1.40E-09	1.46E-09	2.08E-04	See PDW
Benzo(k)fluoranthene	0.00E+00	9.35E-10		9.35E-10	9.72E-10	2.08E-04	See PDW
Benzo(g,h,i)perylene	0.00E+00	1.40E-09		1.40E-09	1.46E-09	9.72E-05	See PDW
Chrysene	0.00E+00	1.40E-09		1.40E-09	1.46E-09	9.72E-05	See PDW
Dibenz(a,h)anthracene	0.00E+00	9.35E-10		9.35E-10	9.72E-10	2.08E-04	See PDW
7,12-Dimethylbenz(a)anthracene	0.00E+00	5.76E-08		5.76E-08	5.98E-08	9.72E-05	Yes
Fluoranthene	0.00E+00	2.34E-09		2.34E-09	2.43E-09	9.72E-05	Yes
Fluorene	0.00E+00	2.18E-09		2.18E-09	2.27E-09	9.72E-05	Yes
Indeno(1,2,3-cd)pyrene	0.00E+00	1.40E-09		1.40E-09	1.46E-09	2.08E-04	See PDW
Naphthalene	5.34E-01	4.79E-07		5.34E-01	2.34E+00	9.72E+01	Yes
Phenanthrene	0.00E+00	1.33E-08		1.33E-08	1.38E-08	9.72E-05	Yes
Pyrene	0.00E+00	3.90E-09		3.90E-09	4.05E-09	9.72E-05	Yes
Propylene Oxide(s) Methyl (PDW, 7 HAP)	0.00E+00	8.59E-09		8.59E-09	9.24E-08	2.08E-04	Yes
Organic HAP Non-PAH							
1,4-Dichlorobenzene	0.00E+00	9.35E-07		9.35E-07	9.72E-07	1.20E+01	Yes
Ethyl Benzene	1.40E-01	0.00E+00		1.40E-01	6.14E-01	2.92E+01	Yes
Hexamethylene Diisocyanate	7.00E-03	0.00E+00		7.00E-03	8.74E-03	2.08E-01	Yes
n-Hexane	4.00E-04	5.91E-03		4.59E-03	1.76E-02	1.20E+01	Yes
Methanol	3.72E-02	0.00E+00		3.72E-02	1.63E-01	7.78E+01	Yes
1-Methoxy-2-Propanol Acetate	1.51E-04	0.00E+00		1.21E-01	1.61E-06	2.46E+01	Yes
Methyl Chloroform	0.00E+00	0.00E+00		0.00E+00	0.00E+00	1.67E+02	Yes
Methyl Isobutyl Ketone	2.87E-01	0.00E+00		2.87E-01	1.26E+00	1.97E+01	Yes
Methyl Methacrylate	0.00E+00	0.00E+00		0.00E+00	0.00E+00	4.10E+01	Yes
Phenol	0.00E+00	0.00E+00		0.00E+00	0.00E+00	1.27E+00	Yes
Xylene	5.73E-01	0.00E+00		5.73E-01	2.51E+00	4.51E+01	Yes
Toluene	4.38E-01	1.12E-05		4.38E-01	1.92E+00	2.50E+01	Yes
Acetone	5.27E-01	0.00E+00		5.27E-01	2.30E+00	2.46E+01	Yes
Organic Non-HAP							
Acetone	5.56E-01	0.00E+00		5.56E-01	2.44E+00	7.78E+01	Yes
n-Amyl Acetate	1.66E-03	0.00E+00		1.66E-03	7.29E-03	2.51E+01	Yes
2-Butoxyethanol	0.00E+00	0.00E+00		0.00E+00	0.00E+00	4.62E+00	Yes
Butyl Acetate	1.19E+00	0.00E+00		1.19E+00	5.21E+00	4.72E+01	Yes
Carbon Black	8.33E-04	0.00E+00		8.33E-04	3.64E-03	2.50E-01	Yes
Cyclohexane	1.79E-02	0.00E+00		1.79E-02	7.84E-02	1.03E+01	Yes
Dichlorobenzene	0.00E+00	0.00E+00		0.00E+00	0.00E+00	9.67E+00	Yes
Diethyl Phthalate	0.00E+00	0.00E+00		0.00E+00	0.00E+00	2.50E+01	Yes
Dimethyl Phthalate	0.00E+00	0.00E+00		0.00E+00	0.00E+00	2.50E+01	Yes
Ethyl Alcohol	6.66E-02	0.00E+00		6.66E-02	2.92E-01	1.27E+02	Yes
Heptane	9.30E-02	0.00E+00		9.30E-02	4.07E-01	1.03E+02	Yes
Isooctanol	3.56E-01	0.00E+00		3.56E-01	1.56E+00	1.00E+01	Yes
Isobutyl Acetate	7.33E-02	0.00E+00		7.33E-02	3.21E-01	4.61E+01	Yes
Isobutyl Alcohol	3.56E-01	0.00E+00		3.56E-01	1.56E+00	1.00E+01	Yes
Isophorone Diisocyanate	2.50E-03	0.00E+00		2.50E-03	1.10E-02	6.95E-01	Yes
Isopropyl Alcohol (IPA)	8.43E-01	0.00E+00		8.43E-01	3.91E+00	9.53E+01	Yes
Isopropyl Acetate	0.00E+00	0.00E+00		0.00E+00	0.00E+00	9.50E+01	Yes
Methyl Acetate	3.17E-01	0.00E+00		3.17E-01	1.43E+00	4.61E+01	Yes
Methyl Ethyl Ketone	7.76E-01	0.00E+00		7.76E-01	1.91E+00	1.50E+01	Yes
Methyl Isobutyl Ketone	1.03E-01	0.00E+00		1.03E-01	4.49E-01	1.50E+01	Yes
Methyl Isobutyl Carbinol	2.00E+00	0.00E+00		0.00E+00	0.00E+00	9.50E+01	Yes
Methyl Propyl Ketone	1.58E-01	0.00E+00		1.58E-01	6.92E-01	9.50E+01	Yes
Propylene Acid	1.51E-03	0.00E+00		1.51E-03	6.61E-03	2.50E+00	Yes
Propyl Acetate	0.00E+00	0.00E+00		0.00E+00	0.00E+00	9.50E+01	Yes
Propyl Alcohol	0.00E+00	0.00E+00		0.00E+00	0.00E+00	9.50E+01	Yes
Trimethyl Benzene	1.68E-01	0.00E+00		1.68E-01	8.34E-01	2.50E+00	Yes
Metal HAP							
Antimony	1.46E-03	0.00E+00		1.46E-03	6.17E-03	2.50E-01	Yes
Arsenic	0.00E+00	1.56E-07		1.56E-07	1.62E-07	1.50E-04	Yes
Beryllium	0.00E+00	9.35E-09		9.35E-09	9.72E-09	2.50E-05	Yes
Cadmium	0.00E+00	8.94E-07		8.94E-07	8.92E-07	1.70E-05	Yes
Chromium	1.61E-04	4.80E-08		1.66E-04	6.47E-03	2.50E-01	Yes
Cobalt	0.00E+00	7.79E-07		2.76E-07	2.87E-01	5.00E-01	Yes
Copper	0.00E+00	2.79E-06	8.53E-03	8.53E-03	3.90E-06	1.25E+00	Yes
Iron Oxide Fume	0.00E+00	0.00E+00		0.00E+00	0.00E+00	2.50E+00	Yes
Manganese	0.00E+00	1.25E-06		1.25E-06	1.30E-06	2.50E-01	Yes
Nickel	0.00E+00	1.64E-06		1.64E-06	1.70E-06	2.50E-01	Yes
Vanadium	0.00E+00	7.55E-08		7.55E-08	7.85E-08	2.50E-01	Yes
Metal Non-HAP							
Aluminum - Metal & Oxide	3.76E-03	0.00E+00	6.77E-02	7.15E-02	1.43E-02	6.67E-01	Yes
Aluminum - Soluble Salts	0.00E+00	0.00E+00		0.00E+00	0.00E+00	1.67E-01	Yes
Barium	2.17E-04	1.64E-05		2.31E-04	9.50E-04	5.00E-01	Yes
Molybdenum	0.00E+00	3.61E-06		3.61E-06	3.76E-06	1.25E-01	Yes
Inorganic HAP							
Selenium	0.00E+00	7.94E-08		7.94E-08	8.19E-08	7.50E-01	Yes
Inorganic Non-HAP							
Calcium Oxide			9.48E-03	9.48E-03		1.33E-01	Yes
Calcium Carbonate	1.30E-03	0.00E+00		1.30E-03	5.70E-03	6.67E-01	Yes
Kaolin	3.93E-03	0.00E+00		3.93E-03	1.72E-02	1.33E-01	Yes
Magnesite	0.00E+00	0.00E+00		0.00E+00	0.00E+00	6.67E-01	Yes
Mica	0.00E+00	0.00E+00		0.00E+00	0.00E+00	2.50E-01	Yes
Silica - Amorphous	1.67E-03	0.00E+00		1.67E-03	7.30E-03	6.67E-01	Yes
Silica - Crystalline Cristobalite	0.00E+00	0.00E+00		0.00E+00	0.00E+00	2.50E-01	Yes
Silica - Crystalline Quartz	2.39E-03	0.00E+00		2.39E-03	1.05E-02	6.00E-01	Yes
Tint and Zinc Oxide Dust	0.00E+00	9.52E-06	2.71E-02	2.72E-02	5.95E-05	6.67E-01	Yes
		HAP...		2.72A	11.94		
		HAP...		0.57A	2.52		

TAP EL Modeling Threshold Multiple 100% Level II / Level III

Assumptions when estimating spray booth heater emissions:

= Maximum gas fired heater size	2.35	MMBtu/hr
= Maximum oil fired heater size	0.00	MMBtu/hr
= Annual heater operation	2080	hr/yr
= Natural gas heat content	1,000	MMBtu/MMscf
= Natural gas sulfur content	45	#s/100 ft³ sulfur weight content
= Fuel type	natural gas	emg
= Heaters	single/multiple	

Assumptions when estimating spray booth emissions:

= Maximum coating use rates	# 30	gal/day for all coatings (excluding "B" component)
= Averaging period	24	hr/day average
= Annual booth operation	8,760	hr/yr
= Safety factor	1.20	allowance for coatings not analyzed
= Transfer efficiency	55%	control for particulates
= Filter removal efficiency	98%	control for particulates
= Isocyanate reaction factor	85%	control for isocyanates (not applied to MDI)
= Maximum coating density	16.10	lb/gal
= % of monomer in mixture	1%	for diisocyanates in hardener mixture

= If no % of TAP was listed in the MSDS, then 1.0% was assumed

Table 2 UNCONTROLLED POTENTIAL TO EMIT FOR CRITERIA POLLUTANTS

Emissions Unit	$PM_{2.5}$ T/yr	PM_{10} T/yr	SO_2 T/yr	NO_x T/yr	CO T/yr	VOC T/yr	Lead lb/quarter
Point Sources							
Paint spray booth(s) and/or preparation station(s)	3.74	3.74	0.0	0.0	0.0	12.24	0.0
Sand Blasting	1.10	11.86	--	--	--	--	--
Paint booth heater(s) [if applicable]	0.026	0.026	0.01	0.59	0.29	0.02	0.0060
Total, Point Sources	**4.96**	**15.63**	**0.01**	**0.59**	**0.29**	**12.26**	**0.01**

Table 3 UNCONTROLLED POTENTIAL TO EMIT FOR HAPs*

HAP Pollutants	PTE (T/yr)
Ethyl benzene	0.61
Methyl Isobutyl Ketone (MIBK)	1.26
Naphthalene	2.34
Toluene	1.92
Styrene	2.51
Xylene (o-, m-, p-isomers)	2.22
Total	**10.87**

Table 4 POST PROJECT POTENTIAL TO EMIT FOR CRITERIA POLLUTANTS

Emissions Unit	$PM_{2.5}$		PM_{10}		SO_2		NO_x		CO		VOC		Lead	
	lb/hr*	T/yr*	lb/hr*	T/yr*	lb/hr*	T/yr*	lb/hr*	T/yr*	lb/hr*	T/yr*	lb/hr*	T/yr*	lb/hr	T/yr
Point Sources														
Paint spray booth(s) and/or preparation station(s)	0.02	0.07	0.02	0.07	0.00	0.00	0	0.00	0	0.00	2.79	12.24	0	0
Sand Blasting	0.34	0.11	1.35	1.16	--	--	--	--	--	--	--	--	--	--
Paint booth heater(s) [if applicable]	0.01	0.03	0.03	0.03	2.00E-03	0.01	0.56	0.59	0.28	0.29	0.02	0.02	2.00E-06	3.00E-06
Post-Project Totals	**0.38**	**0.21**	**1.40**	**1.16**	**0.00**	**0.01**	**0.56**	**0.59**	**0.28**	**0.29**	**2.81**	**12.26**	**2.00E-06**	**3.00E-06**

0.10

Table 5 POST PROJECT POTENTIAL TO EMIT FOR HAPs*

HAP Pollutants	PTE (T/yr)
Ethyl benzene	0.61
Methyl Isobutyl Ketone (MIBK)	1.26
Naphthalene	2.34
Toluene	1.92
Styrene	2.51
Xylene (o-, m-, p-isomers)	2.22
Total	**10.87**

Table 6 CHANGES IN POTENTIAL TO EMIT FOR CRITERIA POLLUTANTS

	$PM_{10}/PM_{2.5}$		SO_2		NO_x		CO		VOC		Lead	
	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Point Sources												
Pre-Project Potential to Emit	0	0	0	0	0	0	0	0	0	0	0	0
Post Project Potential to Emit	1.40	1.16	0.00	0.01	0.56	0.59	0.28	0.29	2.81	12.26	0.00	0.00
Changes in Potential to Emit	**1.40**	**1.16**	**0.00**	**0.01**	**0.56**	**0.59**	**0.28**	**0.29**	**2.81**	**12.26**	**0.00**	**0.00**

Table 7 PTE FOR CRITERIA POLLUTANTS COMPARED TO THE DEQ MODELING GUIDELINE THRESHOLDS

Pollutant	PTE (T/yr)	DEQ Modeling Guideline Threshold (T/yr)	Exceeds Modeling Guideline Threshold?
PM_{10}	1.16	1.5	No
$PM_{2.5}$	0.21	1	No
SO_2	0.01	4	No
NO_x	0.59	4	No
CO	0.29	10	No
Lead	0.00	0.06	No

Table 8 PTE FOR CRITERIA POLLUTANTS COMPARED TO THE SIGNIFICANCE THRESHOLDS

Pollutant	PTE (T/yr)	10% of the Significance Threshold (T/yr)	Exceeds 10% of the Significance Threshold?
PM_{10}	1.16	1.5	No
$PM_{2.5}$	0.21	1.0	No
SO_2	0.01	4.0	No
NO_x	0.59	4.0	No
CO	0.29	10.0	No
VOC	12.26	4.0	Yes

Table 5 PTE Emissions - Sandblaster (B1)

Emission Unit Information	Sand Blasting	
Material Processed	sand	
Emission Concern	PM10 / PM2.5	
Actual Annual Operation	1,560 hr/yr	1,560 hr/yr
Reduction due to full enclosure, no windows/vents, doors closed during blasting operation, sh	50%	50%

Maximum Sandblasting Rate	325,000 lb/yr	325,000 lb/yr
	325,000 lb/yr	325,000 lb/yr
	163 ton/yr	163 ton/yr

set as an annual throughput limit

Emission Factor References from AP-42 Section 13.2.6 Abrasive Blasting		
• PM10/2.5 Emission Factor for abrasive blasting of mild steel	13 lb PM10/1000 lb abrasive	1.3 lb PM2.5/1000 lb abrasive
• Amount of Abrasive used	325,000 lb abrasive/yr	325,000 lb abrasive/yr
• PM emission	4225 lb PM/yr	422.5 lb PM/yr
Uncontrolled emissions	2.708333333 lb PM/hr	0.270833333 lb PM/hr
Controlled Emissions	1.354 lb PM/hr	0.135 lb PM/hr

Potential Controlled Emissions	PM10/PM2.5	1.354 lb PM /hr	0.135 lb PM /hr
Potential Controlled Emission		1.056 ton PM/ yr	0.106 ton PM/ yr
Uncontrolled emission		2.1 ton/yr	0.2 ton/yr
Sand recycled and reused	1	times	

Aluminum oxide is 1.6%	*Uncontrolled*	0.004333333	lb Al/hr
	Controlled	0.002166667	lb Al/hr
Total Al oxide	Uncontrolled	7.53E-02	

From sand SDS:												
Hazardous Components (Specific Chemical ID - Common Names)	CAS No.	%	lb/hr	CAS No.		EL (lb/hr)					facility-wide < EL	
SiO 2 (Silicates)	112926-00-8			112926-00-8	Precipitated silica	0.667	24-hr avg, SB5	NA	different form			
				112926-00-9	Silica gel	0.667	24-hr avg, SB6	NA	different form			
MgO (Magnesium Oxide)	1309-48-4			1309-48-4	Magnesium oxide fume	0.667	24-hr avg, SB6	NA	different form			
Fe2O 3 (Iron Oxide)	1309-37-1			1309-37-1	Iron oxide fume (Fe2O3) as Fe	0.333	24-hr avg, SB6	NA	different form			
Al2O 3 (Aluminum Oxide)	1344-28-1	5.00%	6.77E-02	NA	Aluminum including: Metal & Oxide	0.667	24-hr avg, SB6					
CaO (Calcium Oxide)	1305-78-8	7.00%	9.48E-02	1305-78-8	Calcium oxide	0.133	24-hr avg, SB6					
Ni (Nickel)	7440-02-0			7440-02-0	Nickel	2.70E-05	annual limit, SB6					
Cr2O 3 (Chromium Oxide)	1308-38-9			16065-83-1	Chromium (III) compounds, as Cr	0.033	24-hr avg, SB6	NA	different form			
Copper	744-50-8	0.63%	8.53E-03			0.067	24-hr avg, SB5					
Zinc	7440-66-6	2.00%	2.71E-02			0.667	24-hr avg, SB5					

Coating Type: Surface Prep

Content Weight %

Coating Material	Density	Solids (particulate)	HAP_{TOT}	HAP_{MAX}	Acetone	n-Butyl Alcohol	Dipropylene Glycol Methyl Ether	Ethyl Benzene (HAP)	Isobutanol	Isopropyl Alcohol (IPA)	1-Methoxy-2-Propanol Acetate (HAP)	Methyl n-Amyl Ketone	Methyl Isobutyl Ketone (MIBK)(HAP)	Stoddard Solvent Mineral Spirits	Trimethyl Benzene	Xylene (HAP)
BASF DE17		55%			10%	6.50%		5.50%	10.00%		10.00%					24.60%
BASF DE18		18%							24.10%	45.00%			19.50%			
BASF 902		0%				36.00%	15.00%					10.00%		50.00%	2.00%	

Content lb/gal

Coating Material	Density	Solids (particulate)	HAP_{TOT}	HAP_{MAX}	Acetone	n-Butyl Alcohol	Dipropylene Glycol Methyl Ether	Ethyl Benzene (HAP)	Isobutanol	Isopropyl Alcohol (IPA)	1-Methoxy-2-Propanol Acetate (HAP)	Methyl n-Amyl Ketone	Methyl Isobutyl Ketone (MIBK)(HAP)	Stoddard Solvent Mineral Spirits	Trimethyl Benzene	Xylene (HAP)
BASF DE17	9.17	5.04	3.68	2.26	0.92	0.62	0.00	0.50	0.92	0.00	0.92	0.00	0.00	0.00	0.00	2.26
BASF DE18	7.37	1.33	1.44	1.44	0.00	0.00	0.00	0.00	1.78	3.32	0.00	0.00	1.44	0.00	0.00	0.00
BASF 902	8.74	0.00	0.00	0.00	0.00	2.43	1.01	0.00	0.00	0.00	0.00	0.67	0.00	3.37	0.13	0.00
Maximum (lb/gal)	9.17	5.04	3.68	2.26	0.92	2.43	1.01	0.50	1.78	3.32	0.92	0.67	1.44	3.37	0.13	2.26
Emission Rate (lb/hr)		5.9E-03	7.4E-01	4.5E-01	1.8E-01	4.9E-01	2.0E-01	1.0E-01	3.6E-01	6.6E-01	1.8E-01	1.3E-01	2.9E-01	6.7E-01	2.7E-02	4.5E-01
IDAPA TAP EL (lb/hr)					1.19E+02	1.00E+01	4.00E+01	2.9E+01	1.00E+01	6.53E+01	2.40E+01	1.57E+01	1.37E+01	3.50E+01	6.20E+00	2.9E+01
Below EL?					Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Daily Use Rates (gal/day)	Averaging Period (hr/day)	Transfer Efficiency (%)	Filter Control Efficiency (%)
4.00	24	55.00%	95.00%

Isocyanate Reaction Factor (ratio)	Annual Usage Rate (gal/yr)	Safety Factor (ratio)
85.00%	1,460.0	1.20

Coating Type: Primer

Content Weight %

Coating Material	Density	Solids (particulate)	HAP_{TOT}	HAP_{MAX}	Acetone	Butyl Acetate	Carbon Black (particulate)	Ethyl Benzene (HAP)	Kaolin (particulate)	Magnesium Carbonate	1-Ethoxy-2-Propanol Acetate (HAP)	Methyl Acetate	Methyl n-Amyl Ketone	Methyl Ethyl Ketone (MEK) (HAP)	Naphthalene (HAP)	PCBTF	Phosphoric Acid Salt	Silica Amorphous (particulate)	Silica Crystalline Quartz (particulate)	Toluene (HAP)	Trimethyl Benzene	Xylene (HAP)
BASF DP-20		67%			10 00%	10 00%		1 60%	13 00%	3 00%	10 00%							3%	3 00%			7 70%
BASF DP-21		72%				20 00%		1 10%	25 00%	5 00%	5 20%											5 20%
BASF DP-25		59%			5 00%	20 00%		1 40%	15 00%		5 00%	5 00%	5 00%				5 00%	5%	5 00%		2 00%	6 20%
BASF DP-26		59%			5 00%	20 00%	5 00%	1 40%	15 00%		5 00%	5 00%	5 00%				5 00%		5 00%		2 00%	6 20%
BASF DP-27		59%			5 00%	20 00%	5 00%	1 40%	20 00%		5 00%	5 00%	5 00%						5 00%		2 00%	6 20%
BASF DP-31		66%			5 00%	15 00%		1 50%	10 00%	5 00%	5 00%		5 00%						5 00%			6 70%
BASF DP-200		68%			10 00%				20 00%	5 00%			10 00%	5 00%				5%	5 00%			
BASF DP-210		87%				10 00%				5 00%			10 00%						10 00%			
BASF DP-226		67%			5 00%	5 00%		0 20%	15 00%	5 00%	5 00%	10 00%						5%	5 00%			
BASF DP-236		79%									10 00%		5 00%					9%				
BASF DP-321		54%			10 00%				10 00%	5 00%			10 00%			40 00%			5 00%			
BASF DP-8330		52%			25 00%				5 00%					15 00%	1 00%				10 00%	10 00%		
BASF DP-8335		52%			25 00%		5 00%	0 20%	5 00%					15 00%	1 00%				10 00%	10 00%		
Ducont Nason 421-05		49 01%			1 00%	1 00%	1 00%	0 80%											1 00%	4 00%		3 00%
Ducont Nason 421-08		56 62%				1 00%	0 60%													6 00%		
Ducont Nason 421-09		54 07%			1 00%	1 00%	0 50%							1 00%						9 00%		
Ducont Nason 421-15		52 89%			1 00%	1 00%	0 30%	0 30%						1 00%					6 50%	2 00%		2 00%
Ducont Nason 421-17		62 36%				1 00%		5 90%												2 00%		21 00%
Ducont Nason 421-18		67 04%			1 00%			1 80%									1 00%		0 20%			7 00%
Ducont Nason 421-19		63 85%				1 00%							1 00%									21 00%
Ducont Nason 421-20		61 62%				1 00%	0 20%												0 30%			
Ducont Nason 421-21		51 56%			1 00%	1 00%	0 20%						1 00%						0 10%			
Ducont Nason 421-23		58 92%					0 20%	2 70%												16 00%		10 00%
Ducont Nason 421-30		64 77%			1 00%		0 20%	0 40%														1 00%
Ducont Nason 421-40		53 78%			1 00%	1 00%								1 00%								

Content lb/gal

Coating Material	Density	Solids (particulate)	HAP_{TOT}	HAP_{MAX}	Acetone	Butyl Acetate	Carbon Black (particulate)	Ethyl Benzene (HAP)	Kaolin (particulate)	Magnesium Carbonate	1-Ethoxy-2-Propanol Acetate (HAP)	Methyl Acetate	Methyl n-Amyl Ketone	Methyl Ethyl Ketone (MEK) (HAP)	Naphthalene (HAP)	PCBTF	Phosphoric Acid Salt	Silica Amorphous (particulate)	Silica Crystalline Quartz (particulate)	Toluene (HAP)	Trimethyl Benzene	Xylene (HAP)
BASF DP-20	12 62	8 46	2 46	1 26	1 26	1 26	0 00	0 20	1 88	0 63	1 26	0 00	0 00	0 00	0 00	0 00	0 00	0 63	0 63	0 00	0 00	0 97
BASF DP-21	12 75	9 20	1 44	0 86	0 00	2 55	0 00	0 14	2 56	0 64	0 64	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 66
BASF DP-25	11 58	6 83	1 48	0 72	0 58	2 32	0 00	0 16	1 74	0 00	0 58	0 58	0 58	0 00	0 00	0 00	0 58	0 58	0 58	0 00	0 23	0 72
BASF DP-26	11 96	6 82	1 48	0 72	0 58	2 31	0 58	0 16	1 73	0 00	0 58	0 58	0 58	0 00	0 00	0 00	0 58	0 00	0 58	0 00	0 23	0 72
BASF DP-27	11 41	6 73	1 44	0 71	0 57	2 28	0 57	0 16	2 28	0 00	0 57	0 57	0 57	0 00	0 00	0 00	0 00	0 00	0 57	0 00	0 23	0 71
BASF DP-31	10 85	7 23	1 45	0 73	0 56	1 84	0 00	0 16	1 10	0 56	0 55	0 00	0 55	0 00	0 00	0 00	0 00	0 00	0 55	0 00	0 00	0 73
BASF DP-200	14 04	9 55	0 70	0 70	1 40	0 00	0 00	0 00	2 81	0 70	0 00	0 00	1 40	0 70	0 00	0 00	0 00	0 70	0 70	0 00	0 00	0 00
BASF DP-210	16 76	14 58	0 00	0 00	0 00	1 68	0 00	0 00	0 00	0 84	0 00	0 00	1 68	0 00	0 00	0 00	0 00	0 00	1 68	0 00	0 00	0 00
BASF DP-226	13 73	9 20	0 71	0 69	0 69	0 69	0 00	0 03	2 06	0 69	0 69	1 37	0 00	0 00	0 00	0 00	0 00	0 69	0 69	0 00	0 00	0 00
BASF DP-236	16 04	12 67	1 63	1 63	0 00	0 00	0 00	0 00	0 00	0 00	1 63	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
BASF DP-321	12 08	6 51	0 00	0 00	1 21	0 00	0 00	0 00	1 21	0 00	0 00	0 00	1 21	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
BASF DP-8330	9 19	4 78	2 41	1 36	2 30	0 00	0 46	0 02	0 46	0 00	0 00	0 00	0 00	1 36	0 09	0 00	0 00	0 00	0 92	0 92	0 00	0 00
BASF DP-8335	9 19	4 78	2 41	1 36	2 30	0 00	0 46	0 02	0 46	0 00	0 00	0 00	0 00	1 36	0 09	0 00	0 00	0 00	0 92	0 92	0 00	0 00
Ducont Nason 42	9 52	4 67	0 74	0 36	0 10	0 10	0 38	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 10	0 38	0 00	0 28
Ducont Nason 42	10 28	5 82	0 82	0 82	0 00	0 10	0 06	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 82	0 00	0 00
Ducont Nason 42	9 94	5 37	0 89	0 89	0 10	0 10	0 05	0 00	0 00	0 00	0 00	0 00	0 00	0 10	0 00	0 00	0 00	0 00	0 00	0 89	0 00	0 00
Ducont Nason 42	9 94	5 26	0 55	0 20	0 10	0 10	0 03	0 05	0 00	0 00	0 00	0 00	0 00	0 10	0 00	0 00	0 00	0 00	0 65	0 20	0 00	0 20
Ducont Nason 42	11 88	7 41	3 43	2 48	0 00	0 12	0 00	0 70	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	2 74	0 56	2 48
Ducont Nason 42	13 83	9 27	1 22	0 97	0 14	0 00	0 00	0 25	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 14	0 00	0 03	0 00	0 00	0 97
Ducont Nason 42	12 08	7 66	2 54	2 54	0 00	0 12	0 00	0 00	0 00	0 00	0 00	0 00	0 12	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	2 54
Ducont Nason 42	11 62	7 16	0 00	0 00	0 00	0 12	0 02	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 03	0 00	0 00	0 00
Ducont Nason 42	12 32	5 35	0 00	0 00	0 12	0 12	0 02	0 00	0 00	0 00	0 00	0 00	0 12	0 00	0 00	0 00	0 00	0 00	0 01	0 00	0 00	0 00
Ducont Nason 42	11 16	6 57	3 00	1 78	0 00	0 00	0 02	0 30	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 78	0 00	1 12
Ducont Nason 42	10 91	7 07	0 15	0 11	0 11	0 00	0 02	0 04	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 02	0 00	0 11
Ducont Nason 42	10 24	5 51	3 07	2 87	0 10	0 10	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 10	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
Maximum (lb/gal)	16.78	14.58	3.43	2.87	2.30	2.55	0.58	0.70	2.81	0.84	1.80	1.37	1.68	1.36	0.09	4.82	0.58	0.80	1.88	1.78	0.23	2.94
Emission Rate (lb/hr)		1.7E-02	8.8E-01	5.7E-01	4.8E-01	5.1E-01	8.1E-04	1.4E-01	3.8E-03	1.7E-01	3.2E-01	2.7E-01	3.4E-01	2.8E-01	1.8E-02	8.6E-01	4.1E-02	1.1E-03	2.3E-03	3.6E-01	4.8E-02	5.1E-01
TDAPA TAP EL (lb/hr)					1 19E+02	4 73E+01	2 3E-01	2 9E+01	1 33E-01		2 40E+01	4 07E+01	1 57E+01	3 93E+01	3 33E+00		6 70E-02	6 67E-01	6 7E-03	2 5E+01	6 20E+00	2 9E+01
Below EL ?					Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes

Daily Use Rates (lbs/day)	Averaging Period (hrs/day)	Transfer Efficiency (%)	Filter Control Efficiency (%)
4 00	24	60 00%	94 00%

Isocyanate Reaction Factor (ratio)	Annual Usage Rate (gal/yr)	Safety Factor (ratio)
60 00%	1 440 0	1 25

Coating Type: Base and Color

Content
Wt/vol %

Coating Material	Density	Solids (particulate)	HAP_{Ind}	HAP_{Mod}	Acetone	Aromatic Hydrocarbon	Barium Sulfate	Butyl Acetate	Carbon Black (particulate)	Ethyl Benzene (HAP)	Ethyl 3-Ethoxy Propionate	Ethylene Glycol Monobutyl Ether	Methyl n-Amyl Ketone	Methyl Ethyl Ketone (MEK) (VOC)	Methyl Isobutyl Ketone (HAP) (VOC)	Naphthalene (HAP)	Silica Amorphous (particulate)	Silica Crystalline Quartz (particulate)	Stoddard Solvent Mineral Spirits	Toluene (HAP)	Trimethyl Benzene	VM&P Naphtha	Xylene (HAP)
BASF HO13								93.00%	9.00%	0.40%											5%		13.70%
BASF HO17										1.50%											7.10%		6.50%
BASF HO18										1.50%											6.70%		7.10%
BASF HO45																					5.00%		
BASF HO60										0.50%													2.00%
BASF HO61										0.50%													2.00%
BASF HO80										1.00%													4.00%
BASF HO87										1.00%													5.80%
BASF SC00										0.40%													1.50%
BASF SC01										1.20%											1.70%		5.30%
BASF SC03																				2.30%	1.80%		
BASF SC10										0.10%					4.00%						7.90%		
BASF SC20															4.50%						1.10%		
BASF SC29										0.70%					7.70%						8.80%		1.30%
BASF SC39															5.20%						1.30%		
BASF SC50										0.10%					5.00%						8.80%		
BASF SC51															7.00%						1.10%		
BASF SC53										0.40%					7.00%						1%		2.10%
BASF SC54															4.80%						8.90%		
BASF SC48										0.10%					7.60%						8.60%		
BASF SC54										0.10%					5.60%						8.40%		
BASF SC58										0.10%					4.60%						4.80%		
BASF SC59															8.00%						7.50%		
BASF SC81															4.00%						4.10%		
BASF SC82										0.40%					1.10%						5.80%		2.00%
BASF SC88										0.10%					2.20%						4.90%		
BASF SC87										0.40%					3.20%						6.40%		
BASF SC14															3.00%						4.90%		
BASF SC15															3.00%						4.90%		
BASF SC77															3.50%						6.10%		
BASF SC79															6.80%						7.30%		
BASF SC804										1.50%					4.70%						2.90%		2.50%
BASF SC67															5.40%						5.50%		
BASF SC85															1.10%						5.10%		
BASF SC86															1.10%						5.30%		
BASF SC88															5.00%						8.20%		
BASF SC60										0.10%													3.80%
BASF SC90															7.60%						7.00%		
Dupont Chrome Xasan 472-33		33.91%			0.00%	4.00%			0.00%	0.00%	0.00%			0.00%				0.30%			3.00%			5.20%
Dupont Nexan 471-39		72.31%			0.00%	0.00%				0.20%				0.00%							1.00%			1.00%
Dupont Nexan 472-33		78.87%								2.10%					17.00%	0.30%								4.00%
Dupont Nexan 472-48		84.87%							0.00%	1.40%			0.30%								4.00%		0.00%	1.00%
Dupont Nexan 472-48		81.12%					0.00%		0.00%					0.00%							1.00%			18.00%
Dupont Chrome Xasan 464		37.39%							0.00%	7.40%				0.00%							24.30%			7.00%
Dupont Chrome Xasan 1109903K		74.15%			0.00%				0.00%															20.00%
Dupont Chrome Xasan 1217984		75.17%			0.00%				0.00%	0.40%														18.00%
Dupont Chrome Xasan 1238075		75.43%			0.00%				0.00%															18.00%
Dupont Chrome Xasan 1238186		79.56%			0.00%				0.00%															18.00%
Dupont Chrome Xasan 1251018		73.80%			0.00%				0.00%															20.00%
Dupont Chrome Xasan 1251019		73.80%			0.00%				0.00%															20.00%
Dupont Chrome Xasan 1284761		43.45%			0.00%				0.00%										0.00%					1.00%
Dupont Chrome Xasan 1284984		43.44%			0.00%				0.00%										0.00%					18.00%
Dupont Chrome Xasan 1285082		58.65%			0.00%				0.00%										0.00%					18.00%
Dupont Chrome Xasan 1285134		27.15%			0.00%				0.00%															27.00%
Dupont Chrome Xasan 1285315		40.67%			0.00%				0.00%															18.00%
Dupont Chrome Xasan 1284025		25.74%			0.00%				0.00%	0.10%														29.00%
Dupont Chrome Xasan 1285314		75.51%			0.00%				0.00%															36.00%
Dupont Chrome Xasan 1284184		51.86%			0.00%				0.00%															37.00%
Dupont Chrome Xasan 1284185		40.48%			0.00%				0.00%															29.00%
Dupont Chrome Xasan 1282749		30.05%			0.00%				0.00%															18.00%
Dupont Chrome Xasan 1284984		43.44%			0.00%				0.00%															18.00%
Dupont Chrome Xasan 1285804		29.11%			0.00%				0.00%															29.00%
Dupont Chrome Xasan 1279841		35.81%			0.00%				0.00%															26.00%
Dupont Chrome Xasan 1411024		28.45%			0.00%				0.00%															29.00%
Dupont Chrome Xasan 1287444		26.45%			0.00%				0.00%															29.00%
Dupont Chrome Xasan 1287514		51.80%			0.00%				0.00%	0.10%														31.00%
Dupont Chrome Xasan 1283186		25.88%			0.00%				0.00%	0.10%														19.00%
Dupont Chrome Xasan 1282688		28.89%			0.00%				0.00%															29.00%
Dupont Chrome Xasan P0631K		25.18%			0.00%				0.00%	0.43%														29.00%
Dupont Chrome Xasan P0631K		25.80%			0.00%				0.00%	0.32%														29.00%
Dupont Chrome Xasan P0582K		24.58%			0.00%				0.00%	0.82%														29.00%
Dupont Chrome Xasan P0582K		24.58%			0.00%				0.00%															29.00%
Dupont Chrome Xasan P0635K		25.82%			0.00%				0.00%	0.33%														19.00%
Dupont Chrome Xasan P0637K		24.84%			0.00%				0.00%															31.00%
Dupont Chrome Xasan P1581K		26.92%			0.00%				0.00%															30.00%
Dupont Chrome Xasan P1372K		24.19%			0.00%				0.00%	0.30%														30.00%
Dupont Chrome Xasan P0637		28.71%			0.00%				0.00%															18.00%
Dupont Chrome Xasan P0647K		29.75%			0.00%				0.00%															31.00%
Dupont Chrome Xasan P0651K		26.11%			0.00%				0.00%															29.00%
Dupont Chrome Xasan P0634K		27.98%			0.00%				0.00%															18.00%
Dupont Chrome Xasan P1705K		27.49%			0.00%				0.00%															18.00%
Dupont Chrome Xasan P1304K		34.19%			0.00%				0.00%															18.00%
Dupont Chrome Xasan P1332K		24.68%			0.00%				0.00%	0.10%														29.00%
Dupont Chrome Xasan P1652K		40.67%			0.00%				0.00%															18.00%

Content
Wt/vol %

Coating Material	Density	Solids (particulate)	HAP_{Ind}	HAP_{Mod}	Acetone	Aromatic Hydrocarbon	Barium Sulfate	Butyl Acetate	Carbon Black (particulate)	Ethyl Benzene (HAP)	Ethyl 3-Ethoxy Propionate	Ethylene Glycol Monobutyl Ether	Methyl n-Amyl Ketone	Methyl Ethyl Ketone (MEK) (VOC)	Methyl Isobutyl Ketone (HAP) (VOC)	Naphthalene (HAP)	Silica Amorphous (particulate)	Silica Crystalline Quartz (particulate)	Stoddard Solvent Mineral Spirits	Toluene (HAP)	Trimethyl Benzene	VM&P Naphtha	Xylene (HAP)
BASF HO13	11.9	0.00	2.64	1.83	0.00	0.00	0.00	5.90	0.00	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54	0.00	1.42
BASF HO17	11.9	0.00	1.78	1.78	0.00	0.00	0.00	0.00	0.00	1.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.89	0.00	0.78
BASF HO18	11.9	0.00	1.78	0.84	0.00	0.00	0.00	0.00	0.00	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95	0.00	0.84
BASF HO45	11.9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BASF HO80	11.9	0.00	0.36	0.24	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24
BASF HO81	11.9	0.00	0.47	0.33	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33
BASF HO85	11.9	0.00	0.61	0.48	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48
BASF HO87	11.9	0.00	0.57	0.45	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45
BASF SC00	11.9	0.00	0.72	0.72	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15
BASF SC01	11.9	0.00	0.77	0.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.00	0.00
BASF SC10	11.9	0.00	0.48	0.48	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BASF SC20	11.9	0.00	0.54	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BASF SC29	11.9	0.00	0.83	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	0.00	0.00	0.00	0.00	0.00	0.83	0.00	0.00
BASF SC39	11.9	0.00	0.36	0.24	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.74	0.00	0.00	0.00	0.00	0.00	0.81	0.00	0.00
BASF SC47	11.9	0.00	0.85	0.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	0.00	0.00	0.00	0.00	0.00	0.90	0.00	0.00
BASF SC403	11.9	0.00	0.54	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.74	0.00	0.00	0.00	0.00	0.00	0.71	0.00	0.25
BASF SC44	11.9	0.00	0.57	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.00	0.00	0.00	0.00	0.00	0.79	0.00	0.00
BASF SC45	11.9	0.00	0.48	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.68	0.00	0.00
BASF SC54	11.9	0.00	0.96	0.58	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.87	0.00	0.00	0.00	0.00	0.00	0.78	0.00	0.00
BASF SC58	11.9	0.00	0.96	0.58	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.96	0.00	0.00	0.00	0.00	0.00	0.97	0.00	0.00
BASF SC81	11.9	0.00	0.48	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.54	0.00	0.00
BASF SC87	11.9	0.00	0.48	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.68	0.00	0.24
BASF SC88	11.9	0.00	0.72	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.36	0.00	0.00
BASF SC67	11.9	0.00	0.53	0.43	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.78	0.00	0.00
BASF SC89	11.9	0.00	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.00	0.00	0.96	0.00	0.00
BASF SC74	11.9	0.00	0.36	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.00	0.00	0.00	0.00	0.00	0.36	0.00	0.00
BASF SC77	11.9	0.00	0.38	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.77	0.00	0.00
BASF SC79	11.9	0.00	1.52	0.87	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.58	0.00	0.00	0.00	0.00	0.00	0.87	0.00	0.87
BASF SC804	11.9	0.00	1.52	0.87	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.58	0.00	0.00	0.00	0.00	0.00	0.87	0.00	0.87
BASF SC67	11.9	0.00	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.00	0.00	0.00	0.00	0.00	0.85	0.00	0.00
BASF SC85	11.9	0.00	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.85	0.00	0.00
BASF SC86	11.9	0.00	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.78	0.00	0.00
BASF SC88	11.9	0.00	0.90	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.00	0.00	0.00	0.00	0.00	0.74	0.00	0.00
BASF SC60	11.9	0.00	0.47	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33
BASF SC90	11.9	0.00	0.91	0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Nexan 472-33	8.34	7.77	3.58	0.25	0.00	0.00	0.00	7.08	0.00	0.17	0.00	0.00	0.00	0.00	3.60	0.00	0.00	0.18	0.00	0.25	0.00	0.00	0.75
Dupont Nexan 472-39	10.07	7.54	1.23	1.23	0.00	0.00	0.00	6.70	0.00	0.17	0.00	0.00	0.00	0.00	1.23	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.17
Dupont Nexan 472-33	8.34	6.57	1.39	0.00	0.00	0.00	0.00	5.18	0.00	0.00	0.00	0.00	0.00	0.00	1.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44
Dupont Nexan 472-48	10.93	8.89	0.55	0.44	0.00	0.00	0.00	0.00	0.00	0.14	0.54	0.00	0.00	0.00	3.60	0.00	0.00	0.00	0.00	0.13	0.41	0.00	0.10
Dupont Nexan 472-48	10.87	8.87	2.72	1.86	0.00	0.00	0.00	0.11	0.11	0.00	0.55	0.00	0.00	0.00	0.11	0.11	0.00	0.00	0.00	0.00	0.11	0.00	0.00	1.95
Dupont Chrome Xasan 464	7.81	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Chrome Xasan 1109903K	7.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Chrome Xasan 1217984	7.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Chrome Xasan 1238075K	7.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Chrome Xasan 1238186	7.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Chrome Xasan 1251018	7.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Chrome Xasan 1251019	7.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Chrome Xasan 1284761	9.17	3.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Chrome Xasan 1284984	9.17	3.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Chrome Xasan 1285082	9.17	5.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Chrome Xasan 1285134	9.17	2.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Chrome Xasan 1284025	9.18	2.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Chrome Xasan 1285314	9.17	6.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Chrome Xasan 1279841	7.81	2.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Chrome Xasan 1411024	7.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Chrome Xasan 1287444	7.71	2.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Chrome Xasan 1287514	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Chrome Xasan 1283186	7.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Chrome Xasan 1282688	7.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Chrome Xasan P0631K	7.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Chrome Xasan P0631K	7.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Chrome Xasan P0582K	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Chrome Xasan P0582K	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Chrome Xasan P0635K	7.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Chrome Xasan P0637K	7.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Chrome Xasan P1372K	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Chrome Xasan P0637	7.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Chrome Xasan P0647K	7.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Coating Type: Clearcoat

Content Weight %

Coating Material	Density	Solids (particulate)	HAP_{TOT}	HAP_{MAX}	Acetone	n-Amyl Acetate	Aromatic Hydrocarbon	Butyl Acetate	Ethyl Benzene (HAP)	Ethyl 3-Ethoxy Propionate	Ethyl Acetate	Ethylene Glycol Monobutyl Ether	Hexamethylene Diisocyanate (HDI)(HAP)	Isobutyl Acetate	Isophorone Diisocyanate	Isopropyl Alcohol (IPA)	Methyl Acetate	Methyl n-Amyl Ketone	Methyl Chloroform (HAP)	Methyl Ethyl Ketone (MEK)(HAP)	Methyl Isoamyl Ketone	Methyl Isobutyl Ketone (MIBK)(HAP)	Methyl Propyl Ketone	Naphthalene (HAP)	Propionic Acid	Propylene Glycol Monomethyl Ether Acetate	Silica Amorphous (particulate)	Toluene (HAP)	Trimethyl Benzene	VM&P Naphtha	Xylene (HAP)
BASF DC78NR		35%			25%				1 10%									30 00%				5 10%									6 10%
BASF DC92		45%			10 00%				0 00%									40 00%													4 80%
BASF DC96		35%							1 10%							11 40%															
BASF DC100Z		14%			10 00%			5 00%						5 00%						10 00%											
BASF DC5100		40%			20 00%				0 90%									35 00%				2 60%				15 00%		28 40%		15 00%	4 40%
BASF DC5120		32%			25 00%				0 10%									20 00%				1 80%									5 60%
BASF DC5300		56%			5 00%			10 00%										15 00%													1 30%
BASF DC5335		43%			20 00%												10 00%	30 00%				1 20%			0 20%				9 20%		
BASF DC5600		45%			20 00%			15 00%	0 40%		10 00%						10 00%	15 00%			5 00%	1 20%									1 90%
BASF DC5750		38%						40 00%	2 10%													1 20%	10 00%								1 60%
BASF DC5775		38%			15 00%			10 00%	0 30%								10 00%					3 10%					10 00%				11 80%
BASF DC5800		37%			10 00%																						10 00%				1 40%
DuPont ChromaBase® 7480S		30 95%			1 00%			1 00%	1 20%									10 00%													
DuPont ChromaBase® 7565S		58 18%									1 00%		0 10%					1 00%							1 00%						5 00%
DuPont ChromaBase® 7601S		3 72%				1 00%		1 00%	3 30%									1 00%										13 00%			
DuPont ChromaBase® 7655S		39 12%				1 00%		1 00%																		1 00%		28 00%	2 00%		13 00%
DuPont ChromaBase® 7675S		37 62%				1 00%		1 00%																				27 00%			
DuPont ChromaBase® 7695S		37 76%				1 00%		1 00%		1 00%																1 00%					
DuPont ChromaBase® 7696S		38 10%						1 00%		1 00%																			6 00%		
DuPont ChromaBase® 7765S		47 03%			1 00%			1 00%							1 00%																
DuPont ChromaBase® 7775S		47 01%			1 00%			1 00%	1 30%	1 00%					1 00%													13 00%			
DuPont ChromaBase® 7785S		46 97%						1 00%	1 30%	1 00%	1 00%				1 00%													7 00%			5 00%
DuPont ChromaBase® 7795S		46 97%						1 00%		1 00%					1 00%																5 00%
DuPont ChromaBase® 7875S		71 33%									1 00%		0 10%																		
DuPont ChromaBase® 7895S		63 18%								1 00%		5 00%	0 10%															8 00%			
DuPont ChromaBase® C2-4500S		48 67%			1 00%			1 00%	5 90%									1 00%		1 00%		1 00%									
DuPont ChromaBase® C2-4700S		50 52%																													24 00%
DuPont ChromaBase® C2-7775S		38 23%			1 00%		1 00%		3 00%									1 00%		1 00%											
DuPont ChromaBase® HC-4300S		52 25%						1 00%	4 90%									1 00%		1 00%									2 00%		12 00%
DuPont ChromaBase® HC-4700S		51 65%						1 00%	5 60%									1 00%		1 00%											29 00%
DuPont ChromaBase® HC-7775S		34 95%			1 00%				3 80%									1 00%		1 00%		1 00%									22 00%
DuPont ChromaBase® LH775		47 00%				1 00%		1 00%		1 00%					1 00%			1 00%		1 00%		8 00%						2 00%			15 00%
DuPont ChromaBase® LH779		39 00%			1 00%			1 00%		1 00%								1 00%													
DuPont ChromaBase® LH785		47 00%						1 00%		1 00%					1 00%																

Content Retreat

Coating Material	Density	Solids (particulate)	HAP_{TOT}	HAP_{MAX}	Acetone	n-Amyl Acetate	Aromatic Hydrocarbon	Butyl Acetate	Ethyl Benzene (HAP)	Ethyl 3-Ethoxy Propionate	Ethyl Acetate	Ethylene Glycol Monobutyl Ether	Hexamethylene Diisocyanate (HDI)(HAP)	Isobutyl Acetate	Isophorone Diisocyanate	Isopropyl Alcohol (IPA)	Methyl Acetate	Methyl n-Amyl Ketone	Methyl Chloroform (HAP)	Methyl Ethyl Ketone (MEK)(HAP)	Methyl Isoamyl Ketone	Methyl Isobutyl Ketone (MIBK)(HAP)	Methyl Propyl Ketone	Naphthalene (HAP)	Propionic Acid	Propylene Glycol Monomethyl Ether Acetate	Silica Amorphous (particulate)	Toluene (HAP)	Trimethyl Benzene	VM&P Naphtha	Xylene (HAP)
BASF DC78NR	7 58	2 65	0 00	0 00	1 90	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	2 60	0 00	0 00	0 00	0 43	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 46
BASF DC92	8	3 84	0 43	0 38	0 80	0 00	0 00	0 00	0 05	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	3 20	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
BASF DC96	10 06	3 52	0 11	0 11	0 00	0 00	0 00	0 00	0 11	0 00	0 00	0 00	0 00	0 00	0 00	1 15	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 38
BASF DC100Z	7 33	1 03	3 14	2 08	0 73	0 00	0 00	0 00	0 37	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 73	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
BASF DC5100	7 78	3 11	0 71	0 44	1 56	0 00	0 00	0 00	0 07	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	2 72	0 00	0 00	0 00	0 20	0 00	0 00	0 00	1 10	0 00	2 06	0 00	1 10	0 32
BASF DC5120	8 51	2 72	0 26	0 16	2 13	0 00	0 00	0 00	0 01	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 70	0 00	0 00	0 00	0 16	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 44
BASF DC5300	8 2	4 59	0 02	0 02	0 41	0 00	0 00	0 00	0 82	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 23	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 11
BASF DC5335	7 85	3 38	0 24	0 15	1 57	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	2 36	0 00	0 00	0 00	0 39	0 00	0 00	0 00	0 02	0 00	0 00	0 00	0 75	0 00	0 00
BASF DC5600	7 86	3 62	0 25	0 13	1 58	0 00	0 00	0 00	1 18	0 03	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 18	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 15
BASF DC5750	8 07	3 07	1 37	0 85	0 00	0 00	0 00	0 00	3 23	0 17	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 79	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 13
BASF DC5775	9 26	3 52	0 16	0 13	1 39	0 00	0 00	0 00	0 93	0 03	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 93	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 81	0 00	0 00	0 95
BASF DC5800	8 48	3 51	0 00	0 00	0 95	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 95	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 93	0 00	0 00	0 13
DuPont ChromaBa	7 55	2 34	0 47	0 38	0 08	0 00	0 00	0 00	0 08	0 09	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 08	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
DuPont ChromaBa	6 48	4 93	1 11	1 10	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 28	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 38
DuPont ChromaBa	7 18	0 27	3 18	2 01	0 00	0 00	0 07	0 07	0 24	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 07	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 10	0 00	0 00	0 00
DuPont ChromaBa	8 11	3 17	2 19	2 19	0 00	0 00	0 08	0 08	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	3 07	0 00	2 01	0 14	0 00	0 83
DuPont ChromaBa	8 33	3 13	0 00	0 00	0 00	0 00	0 08	0 08	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	2 19	0 00	0 00	0 00
DuPont ChromaBa	8 39	3 17	0 00	0 00	0 00	0 00	0 08	0 08	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
DuPont ChromaBa	8 25	3 14	0 00	0 00	0 00	0 00	0 00	0 08	0 00	0 08	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
DuPont ChromaBa	8 29	3 90	1 08	1 08	0 00	0 00	0 08	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
DuPont ChromaBa	8 32	3 91	1 11	0 58	0 00	0 00	0 00	0 08	0 00	0 11	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
DuPont ChromaBa	8 34	3 92	0 53	0 42	0 00	0 00	0 00	0 00	0 08	0 11	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
DuPont ChromaBa	8 33	3 91	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
DuPont ChromaBa	8 90	6 35	0 72	0 71	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
DuPont ChromaBa	9 04	6 25	0 01	0 01	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
DuPont ChromaBa	7 97	3 88	2 54	1 91	0 08	0 00	0 00	0 08	0 00	0 47	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
DuPont ChromaBa	8 04	4 06	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
DuPont ChromaBa	7 63	2 92	1 22	0 92	0 08	0 00	0 08	0 00	0 23	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
DuPont ChromaBa	8 10	4 23	2 10	1 62	0 00	0 00	0 00	0 08	0 40	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 08	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 15	0 00	0 92
DuPont ChromaBa	8 04	4 14	2 38	1 77	0 00	0 00	0 00	0 08	0 45	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 08	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 62
DuPont ChromaBa	7 55	2 83	2 25	1 13	0 08	0 00	0 00	0 00	0 29	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 08	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 77
DuPont ChromaBa	8 24	3 87	0 08	0 08	0 00	0 08	0 00	0 08	0 00	0 08	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 08	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 13
DuPont ChromaBa	7 80	3 04	0 00	0 00	0 00	0 00	0 00	0 08	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
DuPont ChromaBa	8 32	3 91	0 00	0 00	0 00	0 00	0 00	0 08	0 00	0 08	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 08	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
Maximum (lb/gal)	10.08	6.35	3.18	2.19	2.13	0.08	0.08	3.23	0.47	0.09	0.79	0.45	0.01	0.37	0.08	1.15	0.93	3.20	0.00	0.73	0.38	0.80	0.79	0.02	0.08	1.10	0.93	2.19	0.75	1.10	1.91
Emission Rate (lb/hr)		**7.4E-03**	6.4E-01	4.4E-01	4.3E-01	1.7E-02	1.7E-02	6.6E-01	9.4E-02	**1.8E-02**	1.6E-01	9.0E-02	**2.7E-04**	7.3E-02	**2.5E-03**	2.3E-01	1.8E-01	6.4E-01	**0.0E+00**	1.5E-01	7.5E-02	1.2E-01	1.5E-01	3.3E-03	1.5E-02	2.2E-01	**1.3E-03**	4.4E-01	1.5E-01	2.2E-01	3.8E-01
IDAPA TAP EL (lb/hr)					1.19E+02	3.53E+01		4.73E+01	2.9E+01		9.93E+01		2.0E-03	4.67E+01	6.0E-03	6.53E+01	4.07E+01	1.57E+01	1.27E+02	3.93E+01	1.60E+01	1.37E+01	4.67E+01	3.33E+00	2.0E+00		5.87E-01	2.5E+01	8.20E+00	9.13E+01	2.9E+01
Below EL?					Yes	Yes		Yes	Yes		Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes

Daily Use Rates (gal/day)	Averaging Period (hr/day)	Transfer Efficiency (%)	Filter Control Efficiency (%)
4.00	24	83.00%	98.00%

Isocyanate Reaction Factor (ratio)	Annual Usage Rate (gal/yr)	Safety Factor (ratio)
83.00%	1,460.0	1.20

Coating Type: Tints, Toners, and Binders

Coating Material	Density	Content Weight % Solids (particulate)	HAP_{ind}	HAP_{max}	Aromatic Hydrocarbon	Barium Sulfate	Butyl Acetate	Carbon Black (particulate)	Ethyl Benzene (HAP)	Ethyl 3-Ethoxy Propionate	Ethylene Glycol Monobutyl Ether	Heptane	Naphthalene (HAP)	Stoddard Solvent Mineral Spirits	Toluene (HAP)	Trimethyl Benzene	VM&P Naphtha	Xylene (HAP)
430-01		44.25%			1.00%		1.00%	5.60%	0.60%				0.40%		4.00%		1.00%	2.60%
430-02		40.95%			1.00%		1.00%	1.30%	0.50%			1.00%	0.50%		5.00%		1.00%	2.00%
430-03		74.89%					1.00%		0.70%									2.00%
430-04		60.77%					1.00%		0.60%			1.00%			2.00%		1%	2.00%
430-05		48.54%			1.00%		1.00%		5.60%			1.00%	0.40%		3.00%		1%	21.00%
430-06		44.34%			1.00%		1.00%		3.30%			1.00%	0.40%		4.00%		1%	12.00%
430-07		51.19%			1.00%		1.00%		1.10%				0.20%				1%	4.00%
430-08		49.05%			1.00%		1.00%		1.40%			1.00%	0.40%		5.00%		1%	5.00%
430-09		51.31%					1.00%		4.90%								1%	18.00%
430-10		49.80%			1.00%		1.00%		0.50%				0.40%		2.00%		1%	2.00%
430-11		43.37%			1.00%		1.00%		0.50%			1.00%	0.40%		2.00%		1%	2.00%
430-12		52.71%			1.00%		1.00%		0.60%				0.30%				1%	2.00%
430-13		46.99%			1.00%		1.00%		0.60%			1.00%	0.30%		4.00%		1%	2.00%
430-14		40.53%			1.00%		1.00%		0.60%			1.00%	0.40%		5.00%		1%	3.00%
430-15		42.38%			1.00%		1.00%		0.70%			1.00%	0.50%		5.00%		1%	3.00%
430-16		46.65%			1.00%		1.00%		0.70%			1.00%	0.40%		4.00%		1%	2.00%
430-17		50.93%			1.00%		1.00%		0.50%				0.30%				1%	2.00%
430-18		53.78%			1.00%		1.00%		0.60%				0.30%				1%	2.00%
430-19		54.70%			1.00%		1.00%		0.50%				0.30%		2.00%		1%	2.00%
430-20		51.75%			1.00%		1.00%		0.50%			1.00%	0.30%		2.00%		1%	2.00%
430-21		44.80%			1.00%		1.00%		0.50%			1.00%	0.40%		2.00%		1%	2.00%
Dupont Nason 430-22		51.24%			1.00%	1.00%	1.00%		0.60%				0.30%		2.00%		1%	2.00%
Dupont Nason 430-23		50.94%			1.00%	1.00%	1.00%		0.70%			1.00%	0.40%		4.00%		1%	3.00%
Dupont Nason 430-24		51.17%			1.00%		1.00%		0.50%				0.20%				1%	2.00%
Dupont Nason 430-25		48.38%			1.00%		1.00%		0.60%			1.00%	0.40%		2.00%		1%	2.00%
Dupont Nason 430-26		56.68%					1.00%		0.50%								1%	2.00%
Dupont Nason 430-27		53.63%			1.00%		1.00%		0.50%			1.00%	0.40%		2.00%		1%	2.00%
Dupont Nason 430-28		53.31%			1.00%		1.00%		0.50%		2.00%				5.00%		1%	2.00%
Dupont Nason 430-29		53.11%			1.00%		1.00%		0.50%		0.20%		0.20%		5.00%		1%	2.00%
Dupont Nason 430-30		43.95%			1.00%		1.00%		0.50%			1.00%		1.00%	4.00%		1%	2.00%
Dupont Nason 430-31		44.96%			1.00%		1.00%		0.50%			1.00%		1.00%	4.00%		1%	2.00%
Dupont Nason 430-32		45.72%					1.00%		0.40%			1.00%			3.00%		1%	2.00%
Dupont Nason 430-33		46.88%			1.00%		1.00%		0.50%			1.00%			4.00%		1%	2.00%
Dupont Nason 430-34		45.57%			1.00%		1.00%		1.00%			1.00%			4.00%	1.00%	1%	4.00%
Dupont Nason 430-35		47.16%					1.00%		0.50%			1.00%			4.00%		1%	4.00%
Dupont Nason 430-36		52.81%			1.00%		1.00%		0.50%				0.40%		2.00%		1%	2.00%
Dupont Nason 430-37		46.65%			1.00%		1.00%		0.60%			1.00%	0.30%		4.00%		1%	2.00%
Dupont Nason 430-38		45.07%			1.00%		1.00%		0.50%			1.00%	0.40%		2.00%		1%	2.00%
Dupont Nason 430-39		41.25%			1.00%		1.00%		0.50%			1.00%	0.20%		1.00%		1%	2.00%
Dupont Nason 430-40		40.98%			1.00%		1.00%		0.40%	1.00%		1.00%	0.20%		7.00%		1%	2.00%
Dupont Nason 430-41		47.84%			1.00%		1.00%		0.50%				0.20%				1%	2.00%
Dupont Nason 430-42		50.12%			1.00%		1.00%		1.20%				0.40%				1%	4.00%
Dupont Nason 430-43		42.85%			1.00%		1.00%		0.50%				0.40%		2.00%		1%	2.00%
Dupont Nason 430-44		45.36%			1.00%		1.00%		0.50%				0.40%		3.00%		1%	2.00%
Dupont Nason 430-45		46.84%				1.00%	1.00%		0.30%								1%	1.00%
Dupont Nason 430-46		48.83%			1.00%		1.00%		1.30%				0.40%		3.00%		1%	5.00%
Dupont Nason 430-47		49.62%			1.00%		1.00%		0.40%		1.00%		0.30%		7.00%		1%	2.00%
Dupont Nason 430-48		45.30%					1.00%		1.00%			1.00%		1.00%	4.00%		1%	4.00%
Dupont Nason 430-49		44.68%					1.00%		0.50%			1.00%		1.00%	3.00%		1%	2.00%
Dupont Nason 430-50		56.01%			1.00%		1.00%		0.50%		2.00%	1.00%	0.20%	1.00%	6.00%		1%	2.00%
Dupont Nason 430-51		51.59%			1.00%		1.00%		0.40%		1.00%		0.20%		8.00%		1%	2.00%
Dupont Nason 430-52		34.84%					1.00%		7.90%								1%	28.00%
Dupont Nason 430-53		55.78%					1.00%		0.80%								1%	3.00%
Dupont Nason 430-54		54.11%			1.00%		1.00%		0.50%		2.00%		0.20%				1%	2.00%
Dupont Nason 430-55		47.70%			1.00%		1.00%		0.80%			1.00%			3.00%		1%	3.00%
Dupont Nason 430-56		52.74%			1.00%		1.00%		0.60%				0.30%				1%	2.00%

Coating Material	Density	Content lb/gal Solids (particulate)	HAP_{ind}	HAP_{max}	Aromatic Hydrocarbon	Barium Sulfate	Butyl Acetate	Carbon Black (particulate)	Ethyl Benzene (HAP)	Ethyl 3-Ethoxy Propionate	Ethylene Glycol Monobutyl Ether	Heptane	Naphthalene (HAP)	Stoddard Solvent Mineral Spirits	Toluene (HAP)	Trimethyl Benzene	VM&P Naphtha	Xylene (HAP)
430-01	8.14	3.60	0.57	0.33	0.08	0.00	0.08	0.54	0.05	0.00	0.00	0.00	0.03	0.00	0.33	0.00	0.08	0.16
430-02	7.94	3.25	0.64	0.40	0.08	0.00	0.08	0.10	0.04	0.00	0.00	0.08	0.04	0.00	0.40	0.00	0.08	0.16
430-03	13.30	9.95	0.36	0.27	0.00	0.00	0.13	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27
430-04	10.47	6.36	0.48	0.21	0.00	0.00	0.10	0.00	0.06	0.00	0.00	0.10	0.00	0.00	0.21	0.00	0.10	0.21
430-05	8.85	4.30	2.67	1.86	0.09	0.00	0.09	0.00	0.51	0.00	0.00	0.09	0.04	0.00	0.27	0.00	0.09	1.85
430-06	8.35	3.70	1.84	1.00	0.08	0.00	0.08	0.00	0.28	0.00	0.00	0.08	0.03	0.00	0.33	0.00	0.08	1.00
430-07	9.10	4.65	0.48	0.36	0.09	0.00	0.09	0.00	0.10	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.09	0.36
430-08	8.81	4.32	1.04	0.44	0.09	0.00	0.09	0.00	0.12	0.00	0.00	0.09	0.04	0.00	0.44	0.00	0.09	0.44
430-09	9.20	4.72	2.11	1.66	0.00	0.00	0.09	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	1.65
430-10	8.43	4.20	0.41	0.17	0.08	0.00	0.08	0.00	0.04	0.00	0.00	0.00	0.03	0.00	0.17	0.00	0.08	0.17
430-11	8.19	3.55	0.40	0.16	0.08	0.00	0.08	0.00	0.04	0.00	0.00	0.08	0.03	0.00	0.16	0.00	0.08	0.16
430-12	8.50	4.48	0.25	0.17	0.09	0.00	0.09	0.00	0.05	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.09	0.17
430-13	8.30	3.86	0.57	0.33	0.08	0.00	0.08	0.00	0.05	0.00	0.00	0.08	0.02	0.00	0.33	0.00	0.08	0.17
430-14	7.93	3.22	0.64	0.40	0.08	0.00	0.08	0.00	0.05	0.00	0.00	0.08	0.03	0.00	0.40	0.00	0.08	0.16
430-15	7.97	3.38	0.73	0.40	0.08	0.00	0.08	0.00	0.06	0.00	0.00	0.08	0.04	0.00	0.40	0.00	0.08	0.24
430-16	8.66	4.21	0.61	0.35	0.09	0.00	0.09	0.00	0.05	0.00	0.00	0.09	0.03	0.00	0.35	0.00	0.09	0.17
430-17	8.62	4.39	0.24	0.17	0.09	0.00	0.09	0.00	0.04	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.09	0.17
430-18	8.60	4.58	0.25	0.17	0.09	0.00	0.09	0.00	0.05	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.09	0.17
430-19	8.65	4.73	0.42	0.17	0.09	0.00	0.09	0.00	0.04	0.00	0.00	0.00	0.03	0.00	0.17	0.00	0.09	0.17
430-20	8.55	4.42	0.42	0.17	0.09	0.00	0.09	0.00	0.05	0.00	0.00	0.09	0.03	0.00	0.17	0.00	0.09	0.17
430-21	8.15	3.66	0.40	0.16	0.08	0.00	0.08	0.00	0.04	0.00	0.00	0.08	0.03	0.00	0.16	0.00	0.08	0.16
Dupont Nason 43(	8.54	4.36	0.42	0.17	0.09	0.09	0.09	0.00	0.05	0.00	0.00	0.00	0.03	0.00	0.17	0.00	0.09	0.17
Dupont Nason 43(	8.48	4.32	0.69	0.34	0.08	0.08	0.08	0.00	0.06	0.00	0.00	0.08	0.03	0.00	0.34	0.00	0.08	0.25
Dupont Nason 43(	8.44	4.32	0.23	0.17	0.08	0.00	0.08	0.00	0.04	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.08	0.17
Dupont Nason 43(	8.35	4.04	0.42	0.17	0.08	0.00	0.08	0.00	0.05	0.00	0.00	0.08	0.03	0.00	0.17	0.00	0.08	0.17
Dupont Nason 43(	8.82	5.00	0.22	0.18	0.00	0.00	0.09	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.18
Dupont Nason 43(	8.76	4.73	0.43	0.18	0.09	0.00	0.09	0.00	0.04	0.00	0.00	0.09	0.04	0.00	0.18	0.00	0.09	0.18
Dupont Nason 43(	9.22	4.92	0.69	0.45	0.09	0.00	0.09	0.00	0.05	0.00	0.18	0.00	0.00	0.00	0.46	0.00	0.09	0.18
Dupont Nason 43(	9.26	4.92	0.71	0.46	0.09	0.00	0.09	0.00	0.05	0.00	0.02	0.00	0.02	0.00	0.45	0.00	0.09	0.19
Dupont Nason 43(	8.07	3.55	0.52	0.32	0.08	0.00	0.08	0.00	0.04	0.00	0.00	0.08	0.00	0.08	0.32	0.00	0.08	0.16
Dupont Nason 43(	8.10	3.84	0.53	0.32	0.08	0.00	0.08	0.00	0.04	0.00	0.00	0.08	0.00	0.08	0.32	0.00	0.08	0.16
Dupont Nason 43(	8.21	3.75	0.44	0.25	0.00	0.00	0.08	0.00	0.03	0.00	0.00	0.08	0.00	0.00	0.25	0.00	0.08	0.16
Dupont Nason 43(	8.32	3.90	0.54	0.33	0.08	0.00	0.08	0.00	0.04	0.00	0.00	0.08	0.00	0.00	0.33	0.00	0.08	0.17
Dupont Nason 43(	8.35	3.81	0.75	0.33	0.08	0.00	0.08	0.00	0.08	0.00	0.00	0.08	0.00	0.00	0.33	0.08	0.08	0.33
Dupont Nason 43(	8.42	3.97	0.76	0.34	0.00	0.00	0.08	0.00	0.08	0.00	0.00	0.08	0.00	0.00	0.34	0.00	0.08	0.34
Dupont Nason 43(	8.51	4.49	0.42	0.17	0.09	0.00	0.09	0.00	0.04	0.00	0.00	0.00	0.00	0.03	0.00	0.17	0.00	0.17
Dupont Nason 43(	8.25	3.87	0.57	0.33	0.08	0.00	0.08	0.00	0.05	0.00	0.00	0.08	0.02	0.00	0.33	0.00	0.08	0.17
Dupont Nason 43(	8.12	3.86	0.40	0.16	0.08	0.00	0.08	0.00	0.04	0.00	0.00	0.08	0.03	0.02	0.16	0.00	0.08	0.16
Dupont Nason 43(	8.00	3.30	0.30	0.16	0.08	0.00	0.08	0.00	0.04	0.00	0.00	0.08	0.02	0.00	0.08	0.00	0.08	0.16
Dupont Nason 43(	7.87	3.23	0.76	0.55	0.08	0.00	0.08	0.00	0.03	0.08	0.00	0.08	0.02	0.00	0.55	0.00	0.08	0.16
Dupont Nason 43(	8.37	4.00	0.23	0.17	0.08	0.00	0.08	0.00	0.04	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.08	0.17
Dupont Nason 43(	8.44	4.23	0.47	0.34	0.08	0.00	0.08	0.00	0.10	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.08	0.34
Dupont Nason 43(	8.15	3.49	0.40	0.16	0.08	0.00	0.08	0.00	0.04	0.00	0.00	0.00	0.03	0.00	0.16	0.00	0.08	0.16
Dupont Nason 43(	8.23	3.73	0.49	0.25	0.08	0.00	0.08	0.00	0.04	0.00	0.00	0.00	0.03	0.00	0.25	0.00	0.08	0.16
Dupont Nason 43(	8.37	3.92	0.11	0.08	0.00	0.08	0.08	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.08
Dupont Nason 43(	8.38	4.10	0.61	0.42	0.08	0.00	0.08	0.00	0.11	0.00	0.00	0.00	0.03	0.00	0.25	0.00	0.08	0.42
Dupont Nason 43(	8.72	4.33	0.85	0.61	0.09	0.00	0.09	0.00	0.03	0.00	0.09	0.00	0.03	0.00	0.61	0.00	0.09	0.17
Dupont Nason 43(	8.34	3.78	0.75	0.33	0.00	0.00	0.09	0.00	0.08	0.00	0.00	0.08	0.00	0.08	0.33	0.00	0.08	0.33
Dupont Nason 43(	8.13	3.63	0.45	0.24	0.00	0.00	0.08	0.00	0.04	0.00	0.00	0.08	0.00	0.08	0.24	0.00	0.08	0.16
Dupont Nason 43(	9.52	5.33	0.83	0.57	0.10	0.00	0.10	0.00	0.05	0.00	0.19	0.10	0.02	0.10	0.57	0.00	0.10	0.19
Dupont Nason 43(	8.92	4.60	0.95	0.71	0.09	0.00	0.09	0.00	0.04	0.00	0.09	0.00	0.03	0.00	0.71	0.00	0.09	0.18
Dupont Nason 43(	7.86	2.77	2.86	2.23	0.00	0.00	0.09	0.00	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	2.23
Dupont Nason 43(	10.51	5.86	0.40	0.32	0.00	0.00	0.11	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.32
Dupont Nason 43(	9.32	5.04	0.25	0.19	0.09	0.00	0.09	0.00	0.05	0.00	0.19	0.00	0.02	0.00	0.00	0.00	0.09	0.19
Dupont Nason 43(	8.79	4.19	0.60	0.26	0.09	0.00	0.09	0.00	0.07	0.00	0.00	0.09	0.00	0.00	0.26	0.00	0.09	0.26
Dupont Nason 43(	8.54	4.50	0.25	0.17	0.09	0.00	0.09	0.00	0.05	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.09	0.17
Maximum (lb/gal)	13.30	9.95	2.88	2.23	0.10	0.09	0.13	0.54	0.83	0.08	0.18	0.10	0.04	0.10	0.71	0.08	0.11	2.23
Emission Rate (lb/hr)		1.2E-02	5.7E-01	4.5E-01	1.9E-02	1.7E-02	2.7E-02	7.5E-04	1.3E-01	1.6E-02	3.8E-02	2.1E-02	8.0E-03	1.9E-02	1.4E-01	1.7E-02	2.1E-02	4.5E-01
IDAPA TAP EL (lb/hr)							4.73E+01	2.3E-01	2.9E+01			1.09E+02	3.33E+00	3.50E+01	2.5E+01	8.20E+00	9.13E+01	2.9E+01
Below EL?							Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes

Daily Use Rates (gal/day)	Averaging Period (hr/day)	Transfer Efficiency (%)	Filter Control Efficiency (%)
4.00	24	60.00%	98.00%

Isocyanate Reaction Factor (ratio)	Annual Usage Rate (gal/yr)	Safety Factor (ratio)
85.00%	1,460.0	1.20

Coating Type: Reducer

Content Weight %

Coating Material	Density	Solids (particulate)	HAP_{TOT}	HAP_{MAX}	Butyl Acetate	Stoddard Solvent Mineral Spirits	Trimethyl Benzene	VM&P Naphtha
BASF UR50		0%			65.00%	15.00%	2.00%	5.00%

Content lb/gal

Coating Material	Density	Solids (particulate)	HAP_{TOT}	HAP_{MAX}	Butyl Acetate	Stoddard Solvent Mineral Spirits	Trimethyl Benzene	VM&P Naphtha
BASF UR50	7.28	0.00	0.00	0.00	4.73	1.09	0.15	0.36
Maximum (lb/gal)	**7.28**	**0.00**	**0.00**	**0.00**	**4.73**	**1.09**	**0.15**	**0.36**
Emission Rate (lb/hr)		**0.0E+00**	**0.0E+00**	**0.0E+00**	**9.5E-01**	**2.2E-01**	**2.9E-02**	**7.3E-02**
IDAPA TAP EL (lb/hr)					4.73E+01	3.50E+01	8.20E+00	9.13E+01
Below EL?					Yes	Yes	Yes	Yes

Daily Use Rates (gal/day)	Averaging Period (hr/day)	Transfer Efficiency (%)	Filter Control Efficiency (%)
4.00	24	65.00%	98.00%

Isocyanate Reaction Factor (ratio)	Annual Usage Rate (gal/yr)	Safety Factor (ratio)
85.00%	1,460.0	1.20

Coating Type: Activators, Reducers, Solvents, and Additives

Current
Volume %

Coating Material	Density	Solids (particulate)	HAP_{incl}	HAP_{excl}	Acetone	Aromatic Hydrocarbon	Butyl Acetate	n-Butyl Alcohol	Cyclohexanone	Ethyl Benzene (HAP)	Ethyl 3-Ethoxy Propionate	Ethyl Alcohol	Ethylene Glycol Monobutyl Ether	Heptane	n-Hexane (HAP)	Isopropyl Alcohol (IPA)	Methyl n-Amyl Ketone	Methyl Ethyl Ketone (MEK) (HAP)	Naphthalene (HAP)	Phosphoric Acid Salt	Stoddard Solvent Mineral Spirits	Toluene (HAP)	Trimethyl Benzene	VM&P Naphtha	Xylene (HAP)
Duxone Nexon 44-102		0.00%				1.00%				1.00%				1.00%	1.00%	1.00%			0.40%			1.00%	13.00%		
Duxone Nexon 44-131		0.00%				7.00%				0.00%			2.00%			1.00%			45.00%			1.00%	13.00%	1.00%	
Duxone Nexon 44-157		0.00%				1.00%			2.00%					0.00%	2.00%	1.00%			0.50%			1.00%	15.00%		1%	
Duxone Nexon 44-126		0.00%				1.00%				0.40%				0.00%					0.10%			1.00%	3.00%	0.70%		
Duxone Nexon 44-139		0.00%			1.00%					0.00%	1.00%			0.00%	1.00%								77.00%			2.00%
Duxone Nexon 44-121		0.00%			1.00%		1.00%			1.00%	1.00%			0.00%	1.00%								14.00%			5.00%
Duxone Nexon 44-129		0.00%			2.00%	1.00%	1.00%						8.00%	0.00%	1.00%								15.00%	1.00%		
Duxone Nexon 44-143		2.70%					1.00%			1.00%	1.00%		17.00%					1.00%					8.00%		1.00%	5.00%
Duxone Nexon 44-149		0.00%						60.00%				1.00%								1.00%						
Duxone Nexon 44-163		0.00%			1.00%						1.00%		70.00%													
Duxone Nexon 44-167		0.00%			1.00%		1.00%										1.00%									
Duxone Nexon 44-168		0.00%			1.00%																					
Duxone Nexon 44-173		0.00%			1.00%				1.00%					1.00%												

Content
Actual

Coating Material	Density	Solids (particulate)	HAP_{incl}	HAP_{excl}	Acetone	Aromatic Hydrocarbon	Butyl Acetate	n-Butyl Alcohol	Cyclohexanone	Ethyl Benzene (HAP)	Ethyl 3-Ethoxy Propionate	Ethyl Alcohol	Ethylene Glycol Monobutyl Ether	Heptane	n-Hexane (HAP)	Isopropyl Alcohol (IPA)	Methyl n-Amyl Ketone	Methyl Ethyl Ketone (MEK) (HAP)	Naphthalene (HAP)	Phosphoric Acid Salt	Stoddard Solvent Mineral Spirits	Toluene (HAP)	Trimethyl Benzene	VM&P Naphtha	Xylene (HAP)
Duxone Nexon 44	8.47	0.00	1.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Duxone Nexon 44	6.80	0.00	3.40	3.40	0.00	0.10	0.00	0.00	0.00	0.01	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00
Duxone Nexon 44	6.78	0.00	1.10	0.34	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Duxone Nexon 44	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Duxone Nexon 44	6.63	0.00	1.40	1.40	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Duxone Nexon 44	6.71	0.00	1.58	1.07	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Duxone Nexon 44	8.01	0.00	1.10	1.04	0.07	0.07	0.07	0.00	0.00	0.00	0.00	0.00	0.53	0.07	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Duxone Nexon 44	7.40	0.00	1.31	0.97	0.00	0.00	0.07	0.00	0.00	0.10	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Duxone Nexon 44	6.65	0.15	0.00	0.00	0.00	0.00	0.00	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Duxone Nexon 44	7.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Duxone Nexon 44	8.61	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Duxone Nexon 44	8.67	0.00	0.00	0.00	0.07	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Duxone Nexon 44	8.75	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Duxone Nexon 44	8.44	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mandrous (target)	**8.75**	0.15	**3.40**	**3.40**	0.09	0.13	0.07	5.40	**5.00**	**0.10**	**0.08**	**0.07**	1.50	0.07	0.13	0.07	0.07	0.07	2.87	0.07	**0.07**	**1.40**	**0.10**	**0.07**	0.37
Emission Rate (lb/hr)		9.6E-04	7.2E-01	5.3E-01	1.6E-02	2.7E-02	1.5E-03	1.1E-03	1.3E-02	1.8E-03	1.6E-03	1.4E-02	3.2E-01	1.4E-02	2.5E-03	1.3E-02	1.3E-02	1.5E-02	9.7E-01	4.8E-03	1.3E-03	2.4E-01	2.8E-02	1.5E-02	7.4E-02
ESAPs T&P El. (lb/hr)				1.19E+02		4.73E+01	1.08E+01	7.00E+01	2.9E+01		1.25E+02		1.09E+02	1.20E+01	6.53E+01	1.57E+01	3.83E+01	3.33E+00	6.70E+02	3.50E+01	2.5E+01	9.70E+00	9.13E+01	7.9E+01
Below R.T.?				Yes		Yes	Yes	Yes	Yes		Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Daily Use Rate (lb/day)	Averaging Period (hr/day)	Transfer Efficiency (%)	Filter Control Efficiency (%)
4.00	24	95.00%	98.00%

Annual Usage Rate (gpy)	Safety Factor (ratio)
1,460.0	1.20

Coating Type: Hardener

Content Weight %

Coating Material	Density	Solids (particulate)	HAP_{TOT}	HAP_{MAX}	Aromatic Hydrocarbon	Butyl Acetate	Carbon Black (particulate)	Diisobutyl Ketone	Ethyl Benzene (HAP)	Ethyl 3-Ethoxy Propionate	Ethyl Acetate	Hexamethylene Diisocyanate (HDI)(HAP)	Isophorone Diisocyanate	Methyl Acetate	Methyl n-Amyl Ketone	Toluene (HAP)	Trimethyl Benzene
BASF DH-16	8 5	56%			1 00%	25 00%	0 60%			1 00%		0 45%	0 20%				3%
BASF DH-18	8 5	56%				20 00%						0 45%	0 20%				
BASF DH-42	8 67	72%				20 00%						0 75%				13 50%	
BASF DH-55	8 16	38%				20 00%		5 00%			15 00%	0 40%	0 10%	20 00%	5 00%	10 00%	
BASF DH-57	8 25	38%				15 00%		5 00%	0 10%			0 40%	0 10%	20 00%			5 30%
BASF DH-59	8 3	38%				5 00%		5 00%				0 40%	0 10%	20 00%			10 00%
BASF DH-60	8 44	55%				35 00%			0 20%			0 60%				13 40%	

Content lb/gal

Coating Material	Density	Solids (particulate)	HAP_{TOT}	HAP_{MAX}	Aromatic Hydrocarbon	Butyl Acetate	Carbon Black (particulate)	Diisobutyl Ketone	Ethyl Benzene (HAP)	Ethyl 3-Ethoxy Propionate	Ethyl Acetate	Hexamethylene Diisocyanate (HDI)(HAP)	Isophorone Diisocyanate	Methyl Acetate	Methyl n-Amyl Ketone	Toluene (HAP)	Trimethyl Benzene
BASF DH-16	8 5	4 76	0 04	0 04	0 09	2 13	0 05	0 00	0 00	0 09	0 00	0 04	0 02	0 00	0 00	0 00	0 21
BASF DH-18	8 5	4 76	0 04	0 04	0 00	1 70	0 00	0 00	0 00	0 00	0 00	0 04	0 02	0 00	0 00	0 00	0 00
BASF DH-42	8 67	6 39	1 26	1 20	0 00	1 77	0 00	0 00	0 00	0 00	0 00	0 07	0 00	0 00	0 00	1 20	0 00
BASF DH-55	8 16	3 10	0 85	0 82	0 00	1 63	0 00	0 41	0 00	0 00	1 22	0 03	0 01	1 63	0 41	0 82	0 00
BASF DH-57	8 25	3 14	0 04	0 03	0 00	1 24	0 00	0 41	0 01	0 00	0 00	0 03	0 01	1 65	0 00	0 00	0 52
BASF DH-59	8 3	3 15	0 03	0 03	0 00	0 42	0 00	0 42	0 00	0 00	0 00	0 03	0 01	1 66	0 00	0 00	0 83
BASF DH-60	8 44	4 64	1 20	1 13	0 00	2 95	0 00	0 00	0 02	0 00	0 00	0 05	0 00	0 00	0 00	1 13	0 00
Maximum (lb/gal)	**8.67**	**6.39**	**1.26**	**1.20**	**0.09**	**2.95**	**0.05**	**0.42**	**0.02**	**0.09**	**1.22**	**0.07**	**0.02**	**1.66**	**0.41**	**1.20**	**0.83**
Emission Rate (lb/hr)		7.5E-03	2.5E-01	2.4E-01	1.7E-02	5 8E-01	7.1E-05	8.3E-02	3.4E-03	1.7E-02	2.4E-01	2.0E-03	5.1E-04	3.3E-01	8.2E-02	2.4E-01	1.7E-01
IDAPA TAP EL (lb/hr)						4 73E+01	2 3E-01	9 67E+00	2 9E+01		9 33E+01	2 0E-03	6 0E-03	4 07E+01	1 57E+01	2 5E+01	8 20E+00
Below EL?						Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes

Daily Use Rates (gal/day)	Averaging Period (hr/day)	Transfer Efficiency (%)	Filter Control Efficiency (%)
4 00	24	65 00%	98 00%

Isocyanate Reaction Factor (ratio)	Annual Usage Rate (gal/yr)	Safety Factor (ratio)
85 00%	1 460 0	1 30

Coating Type: Urethanes

Content
Weight %

Coating Material	Density	Solids (particulate)	HAP_{VOC}	HAP_{Exempt}	Acetone	Aluminum - Metal & Oxide	Antimony & Compounds (particulate) (HAP)	Aromatic Hydrocarbon	Barium (soluble) (particulate)	Butyl Acetate	n Butyl Alcohol	Carbon Black (particulate)	Chromium III (particulate) (HAP)	Ethyl Benzene (HAP)	Ethyl 3 Ethoxy Propionate	Ethyl Acetate	Ethylene Glycol Monobutyl Ether	Hexamethylene Diisocyanate (HDI)(HAP)	Kaolin (particulate)	Methyl n Amyl Ketone	Methyl Ethyl Ketone (MEK)(HAP)	Propylene Glycol Monomethyl Ether Acetate	Silica Amorphous (particulate)	Silica Crystalline Quartz (particulate)	Stoddard Solvent Mineral Spirits	Toluene (HAP)	Trimethyl Benzene	VM&P Naphtha	Xylene (HAP)
Dupont Centari 5000 S1BS		59.51%						1.00%		1.00%																			
Dupont Centari 5000 S1MS		1.00%																										7%		2.00%
Dupont Centari 5000 S07H		52.28%								1.00%		0.40%		0.20%						1.00%										
Dupont Centari 5000 S03H		71.79%								1.00%																				
Dupont Centari 5000 S23H		77.94%												0.30%						1.00%		1.00%								
Dupont Centari 5000 S04H		49.05%						1.00%		1.00%				0.20%						1.00%		1.00%								
Dupont Centari 5000 S05H		48.82%								1.00%		4.10%		1.40%						1.00%								2.00%		
Dupont Centari 5000 S06H		44.38%								1.00%										1.00%							2.00%			
Dupont Centari 5000 S03H		53.24%						1.00%		1.00%										1.00%		1.00%					1.00%	2.00%		
Dupont Centari 5000 S09H		53.24%								1.00%										1.00%		1.00%						1.00%		
Dupont Centari 5000 S12H		74.20%								1.00%										1.00%										
Dupont Centari 5000 S13H		73.19%			1.50%	1.00%	1.00%			1.00%										1.00%										
Dupont Centari 5000 S73H		47.98%				1.00%	1.00%			1.00%										1.00%										
Dupont Centari 5000 S74H		47.13%								1.00%										1.00%										
Dupont Centari 5000 S15H		66.38%																		1.00%							2.00%			
Dupont Centari 5000 S18H		77.69%				1.00%				1.00%										1.00%		1.00%					2.00%			
Dupont Centari 5000 S18H		57.91%						1.00%		1.00%				0.40%						1.00%		1.00%		1.00%						1.00%
Dupont Centari 5000 S19H		49.58%						1.00%		1.00%										1.00%		1.00%					3.00%			
Dupont Centari 5000 S23H		51.08%				25.00%		1.00%		1.00%										1.00%		1.00%					3.00%			
Dupont Centari 5000 S29H		52.70%						1.00%														1.00%					4.00%			
Dupont Centari 5000 S31H		44.08%					1.00%			1.00%										1.00%							1.00%			
Dupont Centari 5000 S38H		48.94%								1.00%										1.00%		1.00%						3.00%		
Dupont Centari 5000 S39H		51.47%					1.00%													1.00%		1.00%								
Dupont Centari 5000 S38H		72.17%			9.00%					1.00%										1.00%										
Dupont Centari 5002 S43H		48.91%						1.00%												1.00%		1.00%						1.00%		
Dupont Centari 5000 S45H		54.32%						1.00%		1.00%										1.00%										
Dupont Centari 5000 S51H		52.59%								1.00%				0.20%						1.00%		1.00%						2.00%		
Dupont Centari 5000 S56H		47.73%								1.00%				0.10%						1.00%		1.00%								
Dupont Centari 5000 S27H		34.38%						1.00%		1.00%				0.10%						1.00%		1.00%								
Dupont Centari 5000 S60H		49.82%				24.00%		1.00%		1.00%										1.00%	1.00%							2.00%		
Dupont Centari 5000 T73A		78.76%												0.40%			2.00%			1.00%		1.00%						2.00%		
Dupont Centari 5000 T74A		69.54%												0.40%			4.00%			1.00%										
Dupont Centari 5000 T78A		62.98%												0.30%		1.00%				1.00%										2.00%
Dupont Centari 5000 T85S		69.05%														1.00%														2.00%
Dupont Centari 5000 T86S		66.19%								1.00%										1.00%										
Dupont Centari 5000 R85S		0.00%														1.00%	9.00%	0.20%												
Dupont Centari 5000 R78S		0.00%														1.00%	40.00%	0.10%												
Dupont Centari 5000 B80S		85.00%															28.00%			1.00%	1.00%									
Dupont Centari 5000 E67S		83.67%												3.20%		1.00%		0.20%			1.00%									
Dupont Centari 5000 B67S		71.90%							1.00%					0.40%		1.00%	13.00%		1.00%		1.00%									
Dupont Centari 5000 A85S		0.00%														1.00%				1.00%	1.00%									1.00%
Dupont Centari 5000 S88S		5.00%																												
Dupont Centari 5000 WSF1050C		56.56%													1.00%					1.00%										
Dupont Imron 5000 (clear)		51.60%			1.00%									0.20%																
Dupont Imron 535U		47.19%				10.00%		1.00%			3.00%			1.10%								1.00%					3.00%			
Dupont Imron 535U		47.19%				14.00%					3.00%			1.10%								1.00%			1.00%					4.00%
Dupont Imron 535U		51.08%				25.00%		1.00%		1.00%	2.00%											1.00%			1.00%					4.00%
Dupont Imron 535U		48.94%				11.00%		1.00%			3.00%			1.10%								1.00%			1.00%			8.00%		
Dupont Imron 535U		39.15%										0.10%		0.20%								1.00%								4.00%
Dupont Imron 535U		37.19%			5.00%									0.10%		1.00%						1.00%					3.00%			
Dupont Imron 539U		39.86%												0.20%		1.00%						1.00%					3.00%			
Dupont Imron 539U		42.83%												0.20%		1.00%						1.00%					4.00%			
Dupont Imron 539U		37.06%								1.00%		1.50%		0.90%		1.00%						1.00%					11.00%			
Dupont Imron 539U		43.28%												0.20%		1.00%						1.00%					3.00%			
Dupont Imron 587U		49.18%				9.00%							4.00%	2.00%		1.00%						1.00%					3.00%			3.00%
Dupont Imron 539U		42.81%												0.20%		1.00%						1.00%					4.00%			
Dupont Imron 540U		47.83%												0.20%		1.00%						1.00%					4.00%			
Dupont Imron 541U		43.80%							1.00%					0.30%		1.00%						1.00%					4.00%			
Dupont Imron 543U		47.47%												0.20%		1.00%						1.00%					4.00%			1.00%
Dupont Imron 544U		41.77%												0.20%		1.00%						1.00%					4.00%			
Dupont Imron 547U		57.18%				0.90%		1.00%						0.10%		1.00%						1.00%					7.00%			
Dupont Imron 548U		49.94%												0.30%		1.00%						1.00%					2.00%			
Dupont Imron 550U		27.08%				2.00%										1.00%						1.00%					2.30%			
Dupont Imron 553U		37.97%												0.20%		1.00%						1.00%					3.00%			
Dupont Imron 554U		32.80%												0.10%		1.00%						1.00%					3.00%		1.00%	
Dupont Imron 555U		54.20%												0.10%		1.00%						1.00%	1.00%				3.00%			
Dupont Imron 556U		47.54%												0.20%		1.00%						1.00%	1.00%				3.00%			
Dupont Imron 557U		38.14%												0.20%		1.00%						1.00%					3.00%			
Dupont Imron 558U		38.48%												0.10%		1.00%						1.00%					3.00%			
Dupont Imron 559U		38.01%												0.20%		1.00%						1.00%					3.00%			1.00%
Dupont Imron 560U		46.33%												0.70%		1.00%				1.00%		1.00%					3.00%			
Dupont Imron 561U		38.52%								1.00%				0.60%		1.00%						1.00%					3.00%			2.00%
Dupont Imron 562U		36.03%								1.00%				1.30%		1.00%						1.00%					3.00%			
Dupont Imron 564U		38.58%												0.20%		1.00%						1.00%					2.00%		1.00%	3.00%
Dupont Imron 565U		36.47%												0.20%		1.00%						1.00%					3.00%		1.00%	
Dupont Imron 567U		35.81%												0.20%		1.00%						1.00%					3.00%			
Dupont Imron 568U		37.67%												0.20%		1.00%						1.00%					3.00%			
Dupont Imron 570U		55.47%								1.00%				0.70%		1.00%				1.00%		1.00%					3.00%			
Dupont Imron 571U		50.00%												0.10%		1.00%						1.00%					3.00%			
Dupont Imron 572U		36.44%														1.00%						1.00%					3.00%		1.00%	
Clearcoat Thinner																											6.00%		1.00%	

Coating Material	Density	Solids (particulate)	HAP_{VOC}	HAP_{Exempt}	Acetone	Aluminum - Metal & Oxide	Antimony & Compounds (particulate) (HAP)	Aromatic Hydrocarbon	Barium (soluble) (particulate)	Butyl Acetate	n-Butyl Alcohol	Carbon Black (particulate)	Chromium III (particulate) (HAP)	Ethyl Benzene (HAP)	Ethyl 3 Ethoxy Propionate	Ethyl Acetate	Ethylene Glycol Monobutyl Ether	Hexamethylene Diisocyanate (HDI)(HAP)	Kaolin (particulate)	Methyl n-Amyl Ketone	Methyl Ethyl Ketone (MEK)(HAP)	Propylene Glycol Monomethyl Ether Acetate	Silica Amorphous (particulate)	Silica Crystalline Quartz (particulate)	Stoddard Solvent Mineral Spirits	Toluene (HAP)	Trimethyl Benzene	VM&P Naphtha	Xylene (HAP)
Dupont Centari 5i	7.87	1.82	0.19	0.19	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.00	0.19
Dupont Centari 5i	8.19	3.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	8.22	4.93	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	14.20	10.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	16.71	12.68	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	8.56	4.27	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	8.24	4.62	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.34	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00
Dupont Centari 5i	8.70	3.64	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.00
Dupont Centari 5i	8.66	4.17	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.09	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.00
Dupont Centari 5i	8.68	4.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.09	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.00
Dupont Centari 5i	16.82	12.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	8.70	3.74	0.23	0.23	0.00	0.00	0.23	0.18	0.18	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	8.80	5.27	0.27	0.27	0.00	0.00	0.27	0.18	0.18	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	8.48	3.99	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	12.47	9.28	0.23	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	14.98	11.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	8.41	4.45	0.12	0.06	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	8.27	4.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	9.32	4.78	0.00	0.00	0.00	0.00	2.33	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	9.55	5.03	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	8.81	3.88	0.26	0.26	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00
Dupont Centari 5i	8.17	4.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	8.43	4.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	14.82	10.68	1.33	0.00	0.00	1.33	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	8.20	4.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	9.32	5.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	9.57	5.05	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	9.68	5.77	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	8.96	3.78	0.08	0.08	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	8.83	4.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	8.83	4.72	0.21	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	8.77	5.10	0.21	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	8.06	4.48	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	9.24	5.32	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	9.82	5.68	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	7.55	0.00	0.08	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	6.75	0.00	0.07	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	9.44	5.67	0.11	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	8.57	5.03	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	13.89	9.99	0.23	0.14	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.14	1.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	8.97	0.00	0.07	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	8.18	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Centari 5i	8.06	4.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Imron 5i	8.33	7.61	0.25	0.25	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Imron 5i	8.64	4.13	0.44	0.25	0.00	0.68	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00
Dupont Imron 5i	8.74	4.97	0.43	0.25	0.00	1.22	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Imron 5i	8.71	4.84	0.43	0.25	0.00	1.22	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont Imron 5i	8.83	4.06	0.44	0.34	0.00	0.95	0.00	0.00	0.00	0.26	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dupont

Coating Type: Rubberized Undercoating

Content Weight %

Coating Material	Density	Solids (particulate)	HAP_{TOT}	HAP_{MAX}	Acetone	Calcium Carbonate (particulate)	Carbon Black (particulate)	Ethyl Benzene (HAP)	Ethyl Alcohol	Heptane	n-Hexane (HAP)	Kaolin (particulate)	Methanol (HAP)	Silica Crystalline Quartz (particulate)	Stoddard Solvent Mineral Spirits	Toluene (HAP)	VM&P Naphtha	Xylene (HAP)
Dupont 492-01												1 00%			1 00%	18 00%	1 00%	
Dupont 492 51						1 00%	0 70%				13 00%	1 00%		0 10%	1 00%	13 00%		
3M Body Schutz						1 00%			5 00%		30 00%				5 00%	0 00%		
SW DUPLI-COLOR Undercoat						12 00%		0 50%				19 00%	2 00%		10 00%			3 00%
DURO KOTE Undercoat															15 00%	15 00%	15 00%	
Quick Dry Rubberized					30 00%	10 00%	5 00%	1 00%		5 00%	13 00%		2 00%	1 00%		5 00%	5 00%	2 00%
Transtar 4363-F					30 00%	2 33%	5 00%	1 00%						1 00%		20 00%	2 85%	1 57%

Content lb/gal

Coating Material	Density	Solids (particulate)	HAP_{TOT}	HAP_{MAX}	Acetone	Calcium Carbonate (particulate)	Carbon Black (particulate)	Ethyl Benzene (HAP)	Ethyl Alcohol	Heptane	n-Hexane (HAP)	Kaolin (particulate)	Methanol (HAP)	Silica Crystalline Quartz (particulate)	Stoddard Solvent Mineral Spirits	Toluene (HAP)	VM&P Naphtha	Xylene (HAP)
Dupont 492-01	9 52	0 00	1 71	1 71	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 10	0 00	0 00	0 10	1 71	0 10	0 00
Dupont 492-51	8 68	0 00	2 26	1 13	0 00	0 09	0 06	0 00	0 00	0 00	1 13	0 09	0 00	0 01	0 09	1 13	0 00	0 00
3M Body Schutz	6 66	0 00	2 00	2 00	0 00	0 07	0 00	0 00	0 33	0 00	2 00	0 00	0 00	0 00	0 33	0 00	0 00	0 00
SW DUPLI-COLC	7 36	0 00	0 41	0 22	0 00	0 89	0 00	0 04	0 00	0 00	0 00	1 40	0 15	0 00	0 74	0 00	0 00	0 22
DURO KOTE Un	8 16	0 00	1 22	1 22	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	1 22	1 22	1 22	0 00
Quick Dry Rubbe	9 30	0 00	2 14	1 21	2 79	0 93	0 46	0 09	0 00	0 46	1 21	0 00	0 19	0 09	0 00	0 46	0 46	0 19
Transtar 4363-F	7 53	0 00	1 70	1 51	2 26	0 18	0 38	0 08	0 00	0 00	0 00	0 00	0 00	0 08	0 00	1 51	0 21	0 12
Maximum (lb/gal)	**9.52**	**0.00**	**2.26**	**2.00**	**2.79**	**0.93**	**0.46**	**0.09**	**0.33**	**0.46**	**2.00**	**1.40**	**0.19**	**0.09**	**1.22**	**1.71**	**1.22**	**0.22**
Emission Rate (lb/hr)		**0.0E+00**	**4.5E-01**	**4.0E-01**	**5.6E-01**	**1.3E-03**	**6.5E-04**	**1.9E-02**	**6.7E-03**	**9.3E-02**	**4.0E-01**	**2.0E-03**	**3.7E-02**	**1.3E-04**	**2.4E-01**	**3.4E-01**	**2.4E-01**	4.4E-02
IDAPA TAP EL (lb/hr)					1 19E+02	6 67E-01	2 3E-01	2 9E+01	1 25E+02	1 09E+02	1 20E+01	1 33E-01	1 73E+01	6 7E-03	3 50E+01	2 5E+01	9 13E+01	2 9E+01
Below EL?					Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Daily Use Rates (gal/day)	Averaging Period (hr/day)	Transfer Efficiency (%)	Filter Control Efficiency (%)
4 00	24	65 00%	98 00%

Isocyanate Reaction Factor (ratio)	Annual Usage Rate (gal/yr)	Safety Factor (ratio)
85 00%	1 460 0	1 20

Coating Type: Bed Liner "Iso" Component

Content Weight %

Coating Material	Density	Solids (particulate)	HAP_{TOT}	HAP_{MAX}	Hexamethylene Diisocyanate (HDI)(HAP)	Methylene Diisocyanate (MDI)(HAP)
BASF XS-310						39.00%
Vortex						60.00%
Rhino 2170 A						60.00%
Monstaliner					0.10%	
Morton 999623					0.35%	
Speedliner 1000						9.66%
Speedliner Primer 450 & 460						11.09%
Langeman 700 A						15.00%
Pro-Tex Black					0.32%	

Content lb/gal

Coating Material	Density	Solids (particulate)	HAP_{TOT}	HAP_{MAX}	Hexamethylene Diisocyanate (HDI)(HAP)	Methylene Diisocyanate (MDI)(HAP)
BASF XS-310	9.80	0.00	3.82	3.82	0.00	3.82
Vortex	8.12	0.00	4.87	4.87	0.00	4.87
Rhino 2170 A	10.33	0.00	6.20	6.20	0.00	6.20
Monstaliner	9.77	0.00	0.01	0.01	0.01	0.00
Morton 999623	9.58	0.00	0.03	0.03	0.03	0.00
Speedliner 1000	8.33	0.00	0.80	0.80	0.00	0.80
Speedliner Primer	8.33	0.00	0.92	0.92	0.00	0.92
Langeman 700 A	9.10	0.00	1.37	1.37	0.00	1.37
Pro-Tex Black	9.50	0.00	0.03	0.03	0.03	0.00
Maximum (lb/gal)	**10.33**	**0.00**	**6.20**	**6.20**	**0.03**	**6.20**
Emission Rate (lb/hr)		**0.0E+00**	**1.2E+00**	**1.2E+00**	**1.0E-03**	**1.2E+00**
IDAPA TAP EL (lb/hr)					2.0E-03	3.0E-03
Below EL?					Yes	No

Daily Use Rates (gal/day)	Averaging Period (hr/day)	Transfer Efficiency (%)	Filter Control Efficiency (%)
4.00	24	65.00%	98.00%

Isocyanate Reaction Factor (ratio)	Annual Usage Rate (gal/yr)	Safety Factor (ratio)
85.00%	1,460.0	1.20

Coating Type: Bed Liner "Iso" Component (MDI-Based)

$L_{sp} = (V_{air}/359) * (273.15/T_{sp}) * 60 * (C_{MDI}/1000000) * MW * k_{MDI} * t_{sp}$

where:

L_{sp} = the annual emissions for spray coating operations	24.77	lb/yr[1]
V_{air} = the exhaust airflow rate	10,000	ft^3/min
359 = the molar volume of an ideal gas	359	ft^3/lbmol @ 0°C and 1-atm
T_{sp} = the spray temperature	308.15	K
$C_{MDI} = (VP_{MDI}/760) \times 10^6$ = the MDI concentration in the exhaust air	0.0458	ppmv
VP_{MDI} = MDI vapor pressure at exhaust temperature	3.48E-05	mmHg[2]
MW = the molecular weight of MDI (250.26)	250.26	lb/lbmol
k_{MDI} = the adjustment factor to the vapor pressure that is a function of MDI concentration i	1.00	
t_{sp} = hr/day x 365 day/yr = is the total time in hours/year that spray coating is occurring	1460	hr/yr
t_{hr} = is the total time in hours/day that spray coating is occurring	4.00	hr/day
T = the spray temperature	95	°F
Emission Rate (lb/hr, 24-hr average)	**2.83E-03**	
IDAPA TAP EL (lb/hr)	3.00E-03	
Below EL?	Yes	

Coating Type: Bed Liner B Component

Content Weight %

Coating Material	Density	Solids (particulate)	HAP_{TOT}	HAP_{MAX}	Acetone	Butyl Acetate	Carbon Black (particulate)	Diethyl toluene diamine (DETA)	Dipropylene Glycol Methyl Ether	Methyl Isoamyl Ketone	Polyether Polyols	Silica Crystalline Quartz (particulate)	Xylene (HAP)
BASF XS-350 Resin								25.00%			70.00%		
Rhino 2170 B								5.00%	60.00%				
Rhino Durospray B													
Langeman Reflex Colorant								20.00%			80.00%		
Langeman 700 B								20.00%			80.00%		
Langeman Reflex 700RA											100.00%		
Pro-Tex Black		73.60%			10.00%	7.00%	1.50%			5.00%		1.50%	1.50%

Content lb/gal

Coating Material	Density	Solids (particulate)	HAP_{TOT}	HAP_{MAX}	Acetone	Butyl Acetate	Carbon Black (particulate)	Diethyl toluene diamine (DETA)	Dipropylene Glycol Methyl Ether	Methyl Isoamyl Ketone	Polyether Polyols	Silica Crystalline Quartz (particulate)	Xylene (HAP)
BASF XS-350 Res	8.39	0.00	0.00	0.00	0.00	0.00	0.00	2.10	0.00	0.00	5.87	0.00	0.00
Rhino 2170 B	8.83	0.00	0.00	0.00	0.00	0.00	0.00	0.44	5.30	0.00	0.00	0.00	0.00
Rhino Durospray E	8.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Langeman Reflex (	8.58	0.00	0.00	0.00	0.00	0.00	0.00	1.72	0.00	0.00	6.86	0.00	0.00
Langeman 700 B	8.58	0.00	0.00	0.00	0.00	0.00	0.00	1.72	0.00	0.00	6.86	0.00	0.00
Langeman Reflex 7	8.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.41	0.00	0.00
Pro-Tex Black	10.24	7.56	0.15	0.15	1.02	0.72	0.15	0.00	0.00	0.51	0.00	0.15	0.15
Maximum (lb/gal)	**10.24**	**7.56**	**0.15**	**0.15**	**1.02**	**0.72**	**0.15**	**2.10**	**5.30**	**0.51**	**8.41**	**0.15**	**0.15**
Emission Rate (lb/hr)		**8.8E-03**	**3.1E-02**	**3.1E-02**	**2.0E-01**	**1.4E-01**	**2.2E-04**	**4.2E-01**	**1.1E+00**	**1.0E-01**	**1.7E+00**	**2.2E-04**	**3.1E-02**
IDAPA TAP EL (lb/hr)					1.19E+02	4.73E+01	2.3E-01		4.00E+01	1.60E+01		6.7E-03	2.9E+01
Below EL?					Yes	Yes	Yes		Yes	Yes		Yes	Yes

Daily Use Rates (gal/day)	Averaging Period (hr/day)	Transfer Efficiency (%)	Filter Control Efficiency (%)
4.00	24	65.00%	98.00%

Isocyanate Reaction Factor (ratio)	Annual Usage Rate (gal/yr)	Safety Factor (ratio)
85.00%	1,460.0	1.20

General PTC Emission Inventories for Automotive Coating Operations

spray booth heater emissions for natural gas and LPG combustion, AP-42 Sections 1.4 and 1.5

(7/98, 7/08)

Heat Input Capacity
3.28 MMBtu/hr

Operating Assumptions:
24 hr/day
2,080 hr/yr
1,000 MMBtu/MMscf

Fuel Use
3.28E-03 MMscf/hr
15 gr/100 ft^3 sulfur weight content
91,500 Btu/gal

Criteria Air Pollutants	Emission Factor	Emissions		BRC Threshold		Below Threshold?	Modeling Threshold	
	lb/MMscf	lb/hr	T/yr				2002 Guidance	
NO_2	170	5.58E-01	5.80E-01	4	T/yr	Yes	1	T/yr
CO	84	2.76E-01	2.87E-01	10	T/yr	Yes	14	lb/hr
$PM_{2.5}/PM_{10}$	7.6	2.50E-02	2.60E-02	1	T/yr	Yes	0.2	lb/hr
							1	T/yr
SO_X	0.6	1.97E-03	2.05E-03	4	T/yr	Yes	0.2	lb/hr
							4.00	T/yr
VOC	5.5	1.81E-02	1.88E-02	4	T/yr	Yes	40	T/yr
Lead	0.0005	1.64E-06	1.71E-06	0.06	T/yr	Yes	0.6	T/yr
			lb/mo					
			1.22E-03				10	lb/mo

Hazardous Air Pollutants (HAP) and Toxic Air Pollutants (TAP)				Modeling Threshold	Below Threshold?
	lb/MMscf	lb/hr	T/yr	EL (lb/hr)	
Organic HAP PAH					
2-Methylnaphthalene	2.40E-05	**1.87E-08**	**8.19E-08**	9.10E-05	Yes
3-Methylchloranthrene	1.80E-06	**1.40E-09**	**6.15E-09**	2.50E-06	Yes
Acenaphthene	1.80E-06	**1.40E-09**	**6.15E-09**	9.10E-05	Yes
Acenaphthylene	1.80E-06	**1.40E-09**	**6.15E-09**	9.10E-05	Yes
Anthracene	2.40E-06	**1.87E-09**	**8.19E-09**	9.10E-05	Yes
Benzo(a)anthracene	1.80E-06	**1.40E-09**	**6.15E-09**	9.10E-05	See POM
Benzo(a)pyrene	1.20E-06	**9.35E-10**	**4.10E-09**	2.00E-06	See POM
Benzo(b)fluoranthene	1.80E-06	**1.40E-09**	**6.15E-09**		See POM
Benzo(g,h,i)perylene	1.20E-06	**9.35E-10**	**4.10E-09**	9.10E-05	Yes
Benzo(k)fluoranthene	1.80E-06	**1.40E-09**	**6.15E-09**		See POM
Chrysene	1.80E-06	**1.40E-09**	**6.15E-09**		See POM
Dibenzo(a,h)anthracene	1.20E-06	**9.35E-10**	**4.10E-09**		See POM
7,12-Dimethylbenz(a)anthracene	1.60E-05	**5.25E-08**	**5.46E-08**		
Fluoranthene	3.00E-06	**2.34E-09**	**1.02E-08**	9.10E-05	Yes
Fluorene	2.80E-06	**2.18E-09**	**9.56E-09**	9.10E-05	Yes
Indeno(1,2,3-cd)pyrene	1.80E-06	**1.40E-09**	**6.15E-09**		See POM
Naphthalene	6.10E-04	**4.76E-07**	**2.08E-06**	3.33	Yes
Phenanthrene	1.70E-05	**1.33E-08**	**5.80E-08**	9.10E-05	Yes
Pyrene	5.00E-06	**3.90E-09**	**1.71E-08**	9.10E-05	Yes
Polycyclic Organic Matter (POM, 7-PAH Group)		**8.89E-09**	**3.89E-08**	2.00E-06	Yes
Organic HAP Non-PAH					
Benzene	2.10E-03	**1.64E-06**	**7.17E-06**	8.00E-04	Yes
Dichlorobenzene	1.20E-03	**9.35E-07**	**4.10E-06**	9.10E-05	Yes
Ethyl benzene		0.00E+00	**0.00E+00**	2.90E+01	Yes
Formaldehyde	7.50E-02	**5.85E-05**	**2.56E-04**	5.10E-04	Yes
n-Hexane	1.80E+00	5.91E-03	**6.15E-03**	12	Yes
Methyl Chloroform		0.00E+00	**0.00E+00**	127	Yes
Styrene		0.00E+00	**0.00E+00**	5.67	Yes
Toluene	3.40E-03	1.12E-05	**1.16E-05**	25	Yes
Xylene		0.00E+00	**0.00E+00**	29	Yes
Organic Non-HAP					
Butane	2.10E+00	6.89E-03	**7.17E-03**		
Ethane	3.10E+00	1.02E-02	**1.06E-02**		
OCDD (TEQ=0.0003)		**0.00E+00**	**0.00E+00**	1.50E-10	Yes
Pentane	2.60E+00	8.54E-03	**8.88E-03**	118	Yes
Propane	1.60E+00	5.25E-03	**5.46E-03**		
Metal HAP					
Arsenic	2.00E-04	**1.56E-07**	**6.83E-07**	1.50E-06	Yes
Beryllium	1.20E-05	**9.35E-09**	**4.10E-08**	2.80E-05	Yes
Cadmium	1.10E-03	**8.58E-07**	**3.76E-06**	3.70E-06	Yes
Chromium	1.40E-03	4.60E-06	**4.78E-06**	0.033	Yes
Cobalt	8.40E-05	2.76E-07	**2.87E-07**	0.0033	Yes
Copper	8.50E-04	2.79E-06	**2.90E-06**	0.013	Yes
Manganese	3.80E-04	1.25E-06	**1.30E-06**	0.067	Yes
Mercury	2.60E-04	8.54E-07	**8.88E-07**	0.003	Yes
Nickel	2.10E-03	**1.64E-06**	**7.17E-06**	2.70E-05	Yes
Vanadium	2.30E-03	7.55E-06	**7.85E-06**	0.003	Yes
Metal Non-HAP					
Barium	4.40E-03	1.44E-05	**1.50E-05**	0.033	Yes
Molybdenum	1.10E-03	3.61E-06	**3.76E-06**	0.333	Yes
Inorganic HAP					
Selenium	2.40E-05	7.88E-08	**8.19E-08**	0.013	Yes
Inorganic non-HAP					
Zinc	2.90E-02	9.52E-05	**9.90E-05**	0.667	Yes

NOTE: TAP emissions are based on 24-hour averages unless shown in **bold**, which are based on annual averages

General PTC Emission Inventories for Automotive Coating Operations

spray booth heater emissions for oil combustion, AP-42 Section 1.3

(5/10)

Heat Input Capacity:
0.00 MMBtu/hr

Operating Assumptions:
24 hr/day
2,080 hr/yr

Fuel Use:
0.00 gal/hr
0.50% sulfur weight content
137,030 Btu/gal

Criteria Air Pollutants	Emission Factor	Emissions		BRC Threshold		Below Threshold?
	lb/gal	lb/hr	T/yr			
NO_2	0.02	0.00E+00	0.00E+00	4	T/yr	Yes
CO	0.005	0.00E+00	0.00E+00	10	T/yr	Yes
$PM_{2.5}/PM_{10}$	0.0033	0.00E+00	0.00E+00	1	T/yr	Yes
SO_x	0.00071	0.00E+00	0.00E+00	4	T/yr	Yes
VOC	0.002493	0.00E+00	0.00E+00	4	T/yr	Yes
Lead	1.51E-05	0.00E+00	0.00E+00	0.06	T/yr	Yes
			lb/mo			
			0.00E+00			

Hazardous Air Pollutants (HAP) and Toxic Air Pollutants (TAP)				Modeling Threshold	Below Threshold?
	lb/gal	lb/hr	T/yr	EL (lb/hr)	
Organic HAP PAH					
2-Methylnaphthalene		**0.00E+00**	**0.00E+00**	9.10E-05	Yes
3-Methylchloranthrene		**0.00E+00**	**0.00E+00**	2.50E-06	Yes
Acenaphthene	2.11E-08	**0.00E+00**	**0.00E+00**	9.10E-05	Yes
Acenaphthylene	2.53E-10	**0.00E+00**	**0.00E+00**	9.10E-05	Yes
Anthracene	1.22E-09	**0.00E+00**	**0.00E+00**	9.10E-05	Yes
Benzo(a)anthracene	4.01E-09	**0.00E+00**	**0.00E+00**	9.10E-05	See POM
Benzo(a)pyrene		**0.00E+00**	**0.00E+00**	2.00E-06	See POM
Benzo(b)fluoranthene	7.40E-10	**0.00E+00**	**0.00E+00**		See POM
Benzo(g,h,i)perylene	2.26E-09	**0.00E+00**	**0.00E+00**	9.10E-05	Yes
Benzo(k)fluoranthene	7.40E-10	**0.00E+00**	**0.00E+00**		See POM
Chrysene	2.38E-09	**0.00E+00**	**0.00E+00**		See POM
Dibenzo(a,h)anthracene	1.67E-09	**0.00E+00**	**0.00E+00**		See POM
7,12-Dimethylbenz(a)anthracene		0.00E+00	**0.00E+00**		
Fluoranthene	4.84E-09	**0.00E+00**	**0.00E+00**	9.10E-05	Yes
Fluorene	4.47E-09	**0.00E+00**	**0.00E+00**	9.10E-05	Yes
Indeno(1,2,3-cd)pyrene	2.14E-09	**0.00E+00**	**0.00E+00**		See POM
Naphthalene	1.13E-06	**0.00E+00**	**0.00E+00**	3.33	Yes
Phenanthrene	1.05E-08	**0.00E+00**	**0.00E+00**	9.10E-05	Yes
Pyrene	4.25E-09	**0.00E+00**	**0.00E+00**	9.10E-05	Yes
Polycyclic Organic Matter (POM, 7-PAH Group)	3.30E-06	**0.00E+00**	**0.00E+00**	2.00E-06	Yes
Organic HAP Non-PAH					
Benzene	2.14E-07	**0.00E+00**	**0.00E+00**	8.00E-04	Yes
Dichlorobenzene		**0.00E+00**	**0.00E+00**	9.10E-05	Yes
Ethyl benzene	6.36E-08	0.00E+00	**0.00E+00**	2.90E+01	Yes
Formaldehyde	3.30E-05	**0.00E+00**	**0.00E+00**	5.10E-04	Yes
n-Hexane		0.00E+00	**0.00E+00**	12	Yes
Methyl Chloroform	2.36E-07	0.00E+00	**0.00E+00**	127	Yes
Styrene		0.00E+00	**0.00E+00**	6.67	Yes
Toluene	6.20E-06	0.00E+00	**0.00E+00**	25	Yes
Xylene	1.09E-07	0.00E+00	0.00E+00	29	Yes
Organic Non-HAP					
Butane		0.00E+00	0.00E+00		
Ethane		0.00E+00	**0.00E+00**		
OCDD (TEQ=0.0003)	9.30E-16	**0.00E+00**	**0.00E+00**	1.50E-10	Yes
Pentane		0.00E+00	**0.00E+00**	118	Yes
Propane		0.00E+00	**0.00E+00**		
Metal HAP					
Arsenic	5.48E-07	**0.00E+00**	**0.00E+00**	1.50E-06	Yes
Beryllium	4.11E-07	**0.00E+00**	**0.00E+00**	2.80E-05	Yes
Cadmium	4.11E-07	**0.00E+00**	**0.00E+00**	3.70E-06	Yes
Chromium	4.11E-07	0.00E+00	**0.00E+00**	0.033	Yes
Cobalt	4.11E-07	0.00E+00	**0.00E+00**	0.0033	Yes
Copper	8.22E-07	0.00E+00	**0.00E+00**	0.013	Yes
Manganese	8.22E-07	0.00E+00	**0.00E+00**	0.067	Yes
Mercury	4.11E-07	0.00E+00	**0.00E+00**	0.003	Yes
Nickel	4.11E-07	**0.00E+00**	**0.00E+00**	2.70E-05	Yes
Vanadium		0.00E+00	**0.00E+00**	0.003	Yes
Metal Non-HAP					
Barium		0.00E+00	**0.00E+00**	0.033	Yes
Molybdenum		0.00E+00	**0.00E+00**	0.333	Yes
Inorganic HAP					
Selenium	2.06E-06	0.00E+00	**0.00E+00**	0.013	Yes
Inorganic non-HAP					
Zinc	5.48E-07	0.00E+00	**0.00E+00**	0.667	Yes

NOTE: TAP emissions are based on 24-hour averages unless shown in **bold**, which are based on annual averages.

APPENDIX B – BLACK DIAMOND SDS AND GREEN DIAMOND SDS

(2018AAG1461)

Material Safety Data Sheet

Material Name: Iron Silicate **MSDS ID: M-001**

U.S. MINERALS

* * *Section 1 - IDENTIFICATION* * *

Material Name:

Iron Silicate

Trade Name:

Black Diamond

Recommended Use

Abrasives, Roofing Granules and other aggregate uses.

Restrictions on Use

None known.

Manufacturer Information

US Minerals, Inc.
2105 North Winds Drive
Dyer, IN 46311

Phone: (219) 864-0909
Fax: 219-864-4675
Emergency # (800) 803-2803; (800) 424-9300 (ChemTrec)

* * *Section 2 - HAZARDS IDENTIFICATION* * *

Classification in accordance with 29 CFR 1910.1200

Acute Toxicity (Oral), Category 4 (47% unknown)
Skin Corrosion / Irritation, Category 3
Eye Damage / Irritation, Category 2A
Carcinogenicity, Category 2
Specific Target Organ Toxicity - Single Exposure, Category 2 (respiratory system)
Specific Target Organ Toxicity - Single Exposure, Category 2 (digestive system and/or systemic toxicity)
Specific Target Organ Toxicity - Repeated Exposure, Category 2 (respiratory system, lungs)

GHS LABEL ELEMENTS

Symbol(s)



NFPA Label



Signal Word

WARNING

Hazard Statement(s)

Harmful if swallowed.
Can cause skin irritation.
May cause damage to respiratory system, lungs through prolonged or repeated exposure.

Precautionary Statement(s)

Prevention

Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/clothing and eye/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

Response

IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth

Storage

Store locked up. Store in a secure, controlled area

Disposal

Dispose in accordance with all applicable regulations.

* * *Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS* * *

CAS	Component	Percent
1309-37-1	Iron oxide (Fe2O3)	45-55
7631-86-9	Silicon Dioxide	30-45
1305-78-8	Calcium oxide	0-7
1344-28-1	Aluminum oxide	0-5
7440-66-6	Zinc	0-2
7440-50-8	Copper	0-0.631

Others

Evidence may exist to indicate that components present in this material in concentrations of less than one percent (or in the case of carcinogens, less than 0.1 percent) could be released in concentrations which would exceed an established OSHA permissible exposure limit or ACGIH Threshold Limit Value, or could present a health risk to employees in those concentrations.

Employee exposure monitoring should be performed to determine exposure levels.

* * *Section 4 - FIRST AID MEASURES* * *

Description of Necessary Measures

Inhalation

If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention.

Skin

If adverse effects occur, wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse. Wash work clothes separately from other household clothing.

Eyes

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Then get immediate medical attention.

Ingestion

If swallowed, get immediate medical attention. Rinse mouth.

Most Important Symptoms/Effects

Acute

Respiratory tract irritation, skin irritation, eye irritation.

Delayed

Respiratory system damage, lung damage.

* * *Section 5 - FIRE FIGHTING MEASURES* * *

Suitable Extinguishing Media

Use extinguishing agents appropriate for surrounding fire.

Unsuitable Extinguishing Media

None known.

Specific Hazards Arising from the Chemical

Negligible fire hazard.

Hazardous Combustion Products

Combustion: oxides of zinc

Fire Fighting Measures

Use extinguishing agents appropriate for surrounding fire. Stay upwind and keep out of low areas. Avoid inhalation of material or combustion by-products.

Special Protective Equipment and Precautions for Firefighters

Wear full protective firefighting gear including self-contained breathing apparatus (SCBA) for protection against possible exposure.

* * *Section 6 - ACCIDENTAL RELEASE MEASURES* * *

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8. Avoid release to the environment.

Methods and Materials for Containment and Cleaning Up

Collect spilled material in appropriate container for disposal. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). If sweeping of a contaminated area is necessary, use a dust suppressant agent. Move containers away from spill to a safe area. Wet down area with water.

* * *Section 7 - HANDLING AND STORAGE* * *

Precautions for Safe Handling

Wash thoroughly after handling. Do not breathe dust. Do not eat, drink or smoke when using this product. Wear protective gloves/clothing and eye/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

Conditions for Safe Storage, including any Incompatibilities

Store and handle in accordance with all current regulations and standards. Protect from physical damage.

* * *Section 8 - PHYSICAL AND CHEMICAL PROPERTIES* * *

Physical State:	Solid	**Appearance:**	black shiny solid
Color:	Black	**Physical Form:**	Solid
Odor:	No characteristic odor	**Odor Threshold:**	Not available
pH:	Not available	**Melting Point:**	Not available
Boiling Point:	Not applicable	**Flash Point:**	Non-flammable; non-explosive
Decomposition:	Not available	**Evaporation Rate:**	Not available
OSHA Flammability Class:	Non - Flammable	**LEL:**	Not available
UEL:	Not available	**Vapor Pressure:**	Not applicable
Vapor Density (air = 1):	Not applicable	**Density:**	Not available
Specific Gravity (water = 1):	Not available	**Water Solubility:**	Marginal
Log KOW:	Not available	**Coeff. Water/Oil Dist:**	Not available
Viscosity:	Not available		

Other Property Information

No additional information is available.

* * *Section 9 - STABILITY AND REACTIVITY* * *

Reactivity

No reactivity hazard is expected.

Chemical Stability

Stable at normal temperatures and pressure.

Possibility of Hazardous Reactions

Will not polymerize.

Conditions to Avoid

Avoid accumulation of airborne dusts.

Incompatible Materials

none

Hazardous Decomposition

Combustion: miscellaneous decomposition products.

* * *Section 10 - EXPOSURE CONTROLS / PERSONAL PROTECTION* * *

Component Exposure Limits

Iron oxide (Fe2O3) (1309-37-1)

ACGIH: 5 mg/m3 TWA (respirable fraction)

NIOSH: 5 mg/m3 TWA (as Fe, dust and fume)
2500 mg/m3 IDLH (as Fe, dust and fume)

OSHA (US): 10 mg/m3 TWA (fume); 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)

Mexico: 5 mg/m3 TWA LMPE-PPT
10 mg/m3 STEL [LMPE-CT] (as Fe)

Silicon Dioxide (7631-86-9)

NIOSH: 6 mg/m3 TWA
3000 mg/m3 IDLH

OSHA (US): 20 mppcf TWA; (80)/(% SiO2) mg/m3 TWA

Calcium oxide (1305-78-8)

ACGIH: 2 mg/m3 TWA

NIOSH: 2 mg/m3 TWA
25 mg/m3 IDLH

OSHA (US): 5 mg/m3 TWA

Mexico: 2 mg/m3 TWA LMPE-PPT

Aluminum oxide (1344-28-1)

OSHA (US): 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)

Mexico: 10 mg/m3 TWA LMPE-PPT

Copper (7440-50-8)

ACGIH: 0.2 mg/m3 TWA (fume)

NIOSH: 1 mg/m3 TWA (dust and mist); 0.1 mg/m3 TWA (fume)
100 mg/m3 IDLH (dust, fume and mist)

OSHA (US): 0.1 mg/m3 TWA (fume); 1 mg/m3 TWA (dust and mist)

Mexico: 0.2 mg/m3 TWA LMPE-PPT (as Cu, fume); 1 mg/m3 TWA LMPE-PPT (as Cu, dust and mist)
2 mg/m3 STEL [LMPE-CT] (as Cu, fume); 2 mg/m3 STEL [LMPE-CT] (as Cu, dust and mist)

Appropriate Engineering Controls

Provide local exhaust or process enclosure ventilation system. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

Individual Protection Measures, such as Personal Protective Equipment

Eyes/Face Protection

Wear splash resistant safety goggles with a faceshield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Skin Protection

Wear appropriate chemical resistant clothing.

Glove Recommendations

Wear appropriate chemical resistant gloves.

Respiratory Protection

Where dust or vapor concentration exceeds or is likely to exceed applicable exposure limits, a NIOSH approved respirator is required.

* * *Section 11 - TOXICOLOGICAL INFORMATION* * *

Acute and Chronic Toxicity

Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following endpoints are published:

Iron oxide (Fe2O3) (1309-37-1)
Oral LD50 Rat >10000 mg/kg
Silicon Dioxide (7631-86-9)
Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >2000 mg/kg
Calcium oxide (1305-78-8)
Oral LD50 Rat 500 mg/kg
Aluminum oxide (1344-28-1)
Oral LD50 Rat >5000 mg/kg

Acute Toxicity Level

Copper (7440-50-8)
Toxic: Ingestion

Information on Likely Routes of Exposure

Inhalation

Throat irritation, difficulty breathing.

Ingestion

Diarrhea, stomach pain, difficulty breathing

Skin Contact

Skin irritant

Eye Contact

Eye irritant

Immediate Effects

Eye and Skin Irritant, Shortness of Breath

Delayed Effects

Respiratory system damage

Medical Conditions Aggravated by Exposure

respiratory disorders, eye disorders, skin disorders

Irritation/Corrosivity Data

respiratory tract irritant, skin irritant, eye irritant,

Local Effects

Calcium oxide (1305-78-8)
Corrosive: inhalation, skin, eye, ingestion
Zinc (7440-66-6)
Irritant: inhalation, skin, eye

Respiratory Sensitization

No data available.

Dermal Sensitization

No data available.

Carcinogenicity

Available data characterizes components of this product as possible carcinogen hazards.

Component Carcinogenicity

Iron oxide (Fe2O3) (1309-37-1)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Supplement 7 [1987]; Monograph 1 [1972] (Group 3 (not classifiable))

DFG: Category 3B (could be carcinogenic for man, with the exception of non-bioavailable ferrous oxides)

Silicon Dioxide (7631-86-9)

IARC: Monograph 68 [1997]; Supplement 7 [1987] (Group 3 (not classifiable))

Mutagenic Data

No data available.

Reproductive Effects Data

No data available.

Tumorigenic Data

No data available.

Specific Target Organ Toxicity - Single Exposure

respiratory system, digestive system

Specific Target Organ Toxicity - Repeated Exposure

respiratory system, lungs

Aspiration Hazard

No data available.

* * *Section 12 - ECOLOGICAL INFORMATION* * *

Ecotoxicity

Component Analysis - Aquatic Toxicity

Silicon Dioxide (7631-86-9)

Fish: 96 Hr LC50 Brachydanio rerio: 5000 mg/L [static]

Algae: 72 Hr EC50 Pseudokirchneriella subcapitata: 440 mg/L

Invertebrate: 48 Hr EC50 Ceriodaphnia dubia: 7600 mg/L

Calcium oxide (1305-78-8)

Fish: 96 Hr LC50 Cyprinus carpio: 1070 mg/L [static]

Zinc (7440-66-6)

Fish: 96 Hr LC50 Pimephales promelas: 2.16 - 3.05 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 0.211 - 0.269 mg/L [semi-static]; 96 Hr LC50 Pimephales promelas: 2.66 mg/L [static]; 96 Hr LC50 Cyprinus carpio: 30 mg/L; 96 Hr LC50 Cyprinus carpio: 0.45 mg/L [semi-static]; 96 Hr LC50 Cyprinus carpio: 7.8 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 3.5 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 0.24 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 0.59 mg/L [semi-static]; 96 Hr LC50 Oncorhynchus mykiss: 0.41 mg/L [static]

Algae: 96 Hr EC50 Pseudokirchneriella subcapitata: 0.11 - 0.271 mg/L [static]; 72 Hr EC50 Pseudokirchneriella subcapitata: 0.09 - 0.125 mg/L [static]

Invertebrate: 48 Hr EC50 Daphnia magna: 0.139 - 0.908 mg/L [Static]

Copper (7440-50-8)

Fish: 96 Hr LC50 Pimephales promelas: 0.0068 - 0.0156 mg/L; 96 Hr LC50 Pimephales promelas: <0.3 mg/L [static]; 96 Hr LC50 Pimephales promelas: 0.2 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 0.052 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 1.25 mg/L [static]; 96 Hr LC50 Cyprinus carpio: 0.3 mg/L [semi-static]; 96 Hr LC50 Cyprinus carpio: 0.8 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 0.112 mg/L [flow-through]

Algae: 72 Hr EC50 Pseudokirchneriella subcapitata: 0.0426 - 0.0535 mg/L [static]; 96 Hr EC50 Pseudokirchneriella subcapitata: 0.031 - 0.054 mg/L [static]

Invertebrate: 48 Hr EC50 Daphnia magna: 0.03 mg/L [Static]

Persistence and Degradability

No information available for the product.

Bioaccumulative Potential

No information available for the product.

Mobility

No information available for the product.

* * *Section 13 - DISPOSAL CONSIDERATIONS* * *

Disposal Methods

Dispose in accordance with all applicable regulations.

* * *Section 14 - TRANSPORT INFORMATION* * *

US DOT Information

Shipping Name: Not Regulated

IMDG Information

Shipping Name: Not Regulated

* * *Section 15 - REGULATORY INFORMATION* * *

Component Analysis

U.S. Federal Regulations

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

Aluminum oxide (1344-28-1)

SARA 313: 1.0 % de minimis concentration (fibrous forms)

Zinc (7440-66-6)

SARA 313: 1.0 % de minimis concentration (dust or fume only)

CERCLA: 454 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 1000 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm)

Copper (7440-50-8)

SARA 313: 1.0 % de minimis concentration

CERCLA: 5000 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 2270 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm)

SARA 311/312 Hazardous Categories

Acute Health: Yes **Chronic Health:** Yes **Fire:** No **Pressure:** No **Reactive:** No

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Iron oxide (Fe2O3)	1309-37-1	Yes	Yes	Yes	Yes	Yes
Silicon Dioxide	7631-86-9	Yes	Yes	Yes	Yes	Yes
Calcium oxide	1305-78-8	Yes	Yes	Yes	Yes	Yes
Aluminum oxide	1344-28-1	Yes	Yes	Yes	Yes	Yes
Zinc	7440-66-6	Yes	Yes	No	Yes	Yes
Copper	7440-50-8	Yes	Yes	Yes	Yes	Yes

Component Analysis - Inventory

Component	CAS	US	CA	EU	AU	PH	JP	KR	CN	NZ
Iron oxide (Fe2O3)	1309-37-1	Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	Yes
Silicon Dioxide	7631-86-9	Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	Yes
Calcium oxide	1305-78-8	Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	Yes
Aluminum oxide	1344-28-1	Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	Yes
Zinc	7440-66-6	Yes	DSL	EIN	Yes	Yes	No	Yes	Yes	Yes
Copper	7440-50-8	Yes	DSL	EIN	Yes	Yes	No	Yes	Yes	Yes

* * *Section 16 - OTHER INFORMATION* * *

NFPA Ratings: Health: 1 **Fire:** 0 **Reactivity:** 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe



Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of LIsts™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

Other Information

Disclaimer: Supplier gives no warranty whatsoever, including the warranties of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser shall determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental, consequential or any other damages arising out of the use or misuse of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights.

End of Sheet M-001

Green Diamond Sand Products
Abrasives Spec Sheet

Green Diamond Abrasives is fused magnesium ortho silicate, formed from molten lateritic ore and granulated by quenching. The quenching process produces and amorphous non-crystalline form of hard durable granule. Green Diamond Sand is non metallic and chemically inert.

Green Diamond Abrasives are manufactured in the U.S.A.

Materials Properties
Shape: Angular to Sub Angular
Hardness: 7 on the Mohs hardness scale
Color: Green to Gray
Specific Gravity: 3.3
Bulk Density: 85 to 105 lb. Per Cu. Ft.
Certifications: QPL Mil 22262 b (SH), CARB Title 17,
AASHTO (T104-90-T12-87)
Contains no free silica
Product Specifications: See spec sheets also custom blending available
Packaging: Jumbo bags, 100 and 50 lb. paper bags
Bulk: Rail covered hoppers and trucks pneumatic or container type

Typical Analysis

Silicon Dioxide	50.9
Magnesium Oxide	32.8
Iron Oxide	11.7
Aluminum Oxide	1.2

Environmental: ***Green Diamond Abrasives*** meet the TCLP (40 CFR 261.24a) Criteria prior to its use.
Green Diamond Abrasives contain no heavy metals exceeding the levels of the TCLP.

GREEN DIAMOND SAND PRODUCTS

ABRASIVE PRODUCTS

(1636, 2050, 3060)

MATERIAL SAFETY DATA SHEET

SECTION I - PRODUCT IDENTIFICATION		HMIS
Manufacturer's Name:	Green Diamond Sand Products	Health - O
Telephone:	(541) 874-3111	Flammability - O
Address:	PO Box D, Riddle, OR 97469	Reactivity - O
Date Prepared:	August 1, 2010	Protective Gear - K

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous Components (Specific Chemical ID - Common Names)	CAS No.	ACGIH TLV	OSHA PEL
SiO_2 (Silicates)	112926-00-8	10 mg/m3	10 mg/m3
MgO (Magnesium Oxide)	1309-48-4	10 mg/m3	10 mg/m3
Fe_2O_3 (Iron Oxide)	1309-37-1	10 mg/m3*	10 mg/m3
Al_2O_3 (Aluminum Oxide)	1344-28-1	10 mg/m3	10 mg/m3
CaO (Calcium Oxide)	1305-78-8	2 mg/m3	5 mg/m3
Ni (Nickel)	7440-02-0	1 mg/m3	1 mg/m3
Cr_2O_3 (Chromium Oxide)	1308-38-9	10 mg/m3*	15 mg/m3*

*Regulated as for nuisance particulate (dust).

TYPICAL ANALYSIS:

SiO_2	50.2%
MgO	31.4%
Fe_2O_3	15.9%
Al_2O_3	1.6%
CaO	0.7%
Ni + NiO	<.1%
Cr_2O_3	.1%
Trace Elements & Compounds (total)	1.5%
TOTAL	99.8%

*All SiO_2 reported in Green Diamond materials is in the form of silicates and contains **no** crystalline silica. Crystalline silica is the only form of silica suspected of being carcinogenic.*

SECTION 313 SUPPLIER NOTIFICATION

This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372):

CAS #	Chemical Name	Percent by Weight
7440-02-0	Nickel	<.1%

This information should be included in all MSDSs that are copied and distributed for this material.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point:	NA
Vapor Pressure (mm Hg.):	NA
Vapor Density (AIR = 1):	NA
Specific Gravity (H2O = 1):	3.0
Melting Point:	2,650 Deg. F
Evaporation Rate:	NA
Solubility in Water:	Not soluble in water
Appearance and Odor:	Green, Gray granular, no odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point:	NA
Flammable Limits:	NA
Extinguishing Media:	NA
Special Fire Fighting Procedures:	None
Unusual Fire & Explosion Hazards:	None

SECTION V - REACTIVITY DATA

Stability:	Stable
Conditions to Avoid:	None
Incompatibility (materials to avoid):	None
Hazardous Decomposition or By-Products:	None
Hazardous Polymerization:	Will not occur
Conditions to Avoid:	None

SECTION VI - HEALTH HAZARD DATA

Route(s) of Entry:	Inhalation?	Yes
	Skin?	No
	Ingestion?	No
Health Hazards (Acute & Chronic):		No specific health hazards; should avoid specified limits for compounds listed in Section II.
Carcinogenicity:	NTP?	No
	IARC Monographs?	No
	OSHA Regulated?	Yes, control for compounds in Section II and for nuisance dust.
Sign & Symptoms of Exposure:		Typical of over exposure to nuisance dust.
Medical Conditions Generally Aggravated by Exposure:		Respiratory conditions.
Emergency & First Aid Procedures:		As relevant for over exposure to nuisance dust.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING & USE

Steps to be Taken in Case Material is Released or Spilled:	Clean up with broom or vacuum.
Waste Disposal Method:	Follow federal, state, and local regulations for disposal as in inert solid waste.
Precautions to be Taken in Handling & Storing:	No specific precautions.
Other Precautions:	None

SECTION VIII - CONTROL MEASURES

Respiratory Protection (Specify Type):	NIOSH/OSHA/MSHA approved particulate filter respirator.
Ventilation:	Yes
Local Exhaust:	Yes
Mechanical (General):	Use to meet TLV requirement if dust is generated.
Special:	None
Other:	None
Protective Gloves:	Yes, if handling.
Eye Protection:	Yes, safety glasses.
Other Protective Clothing or Equipment:	Appropriate apparel.
Work/Hygienic Practices:	Use material for the purpose intended and incorporate methods of dust control that are effective in maintaining airborne dust concentrations within the TLV.

NOTICE

While the information included in this MSDS has been obtained from reliable sources, this information is furnished without any warranty (expressed or implied), representation, inducement, or license except that it is accurate to the best of Green Diamond Sand Products knowledge. This information is offered solely for your consideration, investigation, and verification. Any use of this information must be determined by the user to be in accordance with applicable federal, state, and local laws and regulations. Furthermore, the conditions or methods of handling, storage, use and disposal of the product are beyond the control and knowledge of Green Diamond Sand Products. Green Diamond Sand Products does not assume responsiblity and expressly disclaim liability for any loss, damage, or expense arising out of or in any way connected with the handling, storage, use, or disposal of the product. Buyer assumes all risks in its use of the product.

APPENDIX C – PROCESSING FEE

(2018AAG1506)

PTC Processing Fee Calculation Worksheet

Instructions:
Fill in the following information and answer the following questions with a Y or N. Enter the emissions increases and decreases for each pollutant in the table.

Company:
Address:
City:
State:
Zip Code:
Facility Contact:
Title:
AIRS No.:

N	Does this facility qualify for a general permit (i.e. concrete batch plant, hot-mix asphalt plant)? Y/N
Y	Did this permit require engineering analysis? Y/N
N	Is this a PSD permit Y/N (IDAPA 58.01.01.205.04)

Emissions Inventory			
Pollutant	Annual Emissions Increase (T/yr)	Annual Emissions Reduction (T/yr)	Annual Emissions Change (T/yr)
NO_X	0.6	0	0.6
SO_2	0.0	0	0.0
CO	0.3	0	0.3
PM10	1.2	0	1.2
VOC	12.3	0	12.3
Total:	0.0	0	**14.3**
Fee Due	$ 5,000.00		

Comments: