

1. Identification of the substance/mixture and of the company/undertaking

Manufacturer: Axalta Coating Systems, LLC
Applied Corporate Center
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Glen Mills, PA 19342

Telephone: Product information: (855) 6-AXALTA
Medical emergency: (855) 274-5698
Transportation emergency: (800) 424-9300 (CHEMTREC)

Product: **Tufcote™ Alkyd and Corlar® Epoxy Colorants**

DOT Shipping Name: See DOT Addendum.

Hazardous Materials Information: See Section 10.

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2. Composition/information on ingredients

INGREDIENTS	CAS #	VAPOR PRESSURE	EXPOSURE LIMITS
Aldehyde resin	Not Avail	2.0	A None, O None
Amorphous silica	7631-86-9	2.0	A 3.0 mg/m3 Respirable Dust, O 20.0 mppcf, D 3.0 mg/m3, D 6.0 mg/m3
Azo yellow pigment	31837-42-0	None	A 10.0 mg/m3, O 15.0 mg/m3, O 5.0 mg/m3 Respirable Dust
Barium sulfate	7727-43-7	None	O 15.0 mg/m3 Total Dust, O 5.0 mg/m3 Respirable Dust, D 10.0 mg/m3 8 & 12 hour TWA Total Dust, D 5.0 mg/m3 8 & 12 hour TWA Respirable Dust, A None
Carbon black	1333-86-4	None	A 3.0 mg/m3, O 3.5 mg/m3, D 0.5 mg/m3 8 & 12 hour TWA
Dipropylene glycol methyl ether	34590-94-8	0.4@25.0 °C	A None, O None
Dolomite	16389-88-1	None	A None, O None
Ethylbenzene	100-41-4	9.5	A 20.0 ppm, O 100.0 ppm, D 25.0 ppm 8 & 12 hour TWA
Hydrous magnesium silicate	14807-96-6	None	A 2.0 mg/m3 Respirable Dust, D 0.5 mg/m3 8 & 12 hour TWA Respirable Dust, O None
Iron hydroxide	20344-49-4	None	A None, O None
Iron oxide	1309-37-1	None	A 5.0 mg/m3 Respirable Dust, O 10.0 mg/m3, D 3.0 mg/m3
Limestone (calcium carbonate)	1317-65-3	None	A 10.0 mg/m3, O 15.0 mg/m3 Total Dust, O 5.0 mg/m3 Respirable Dust
Magnesite	546-93-0	None	A None, O None
Manganese (iv) oxide	1313-13-9	None	A 0.2 mg/m3 Mn, O 5.0 mg/m3 CEIL Mn
Miscellaneous pigments	Not Avail	None	A None, O None
Monoazo pigment	12236-62-3	None	A 10.0 mg/m3 inhalable dust particulate, O 15.0 mg/m3 Total Dust, O 5.0 mg/m3 Respirable Dust
Phthalocyanine blue pigment	68987-63-3	None	A None, O None
Phthalocyanine green pigment	14302-13-7	None	A None, O None
Pigment orange 34	15793-73-4	None	A None, O None
Pigment yellow 151	31837-42-0	None	A None, O None
Pigment yellow 83	5567-15-7	None	A None, O None
Propylene glycol monomethyl ether acetate	108-65-6	3.8	D 30.0 ppm 15 min TWA, A None, O None
Quartz-crystalline silica	14808-60-7	<0.0	A 25.0 ug/m3 Respirable Dust, O 0.3 mg/m3 Total Dust, O 0.1 mg/m3 Respirable Dust, D 20.0 ug/m3 Respirable Dust, D 10.0 ug/m3 12 hr TWA Respirable Dust
Quinacridone pigment	1047-16-1	None	A 10.0 mg/m3 inhalable dust, O 15.0 mg/m3 Total Dust PNOR, O 5.0 mg/m3 Respirable Dust, D 10.0 mg/m3 Total Dust
Red iron oxide light	1332-37-2	None	A 10.0 mg/m3 PNOR, A 3.0 mg/m3 Respirable Dust, A 5.0 mg/m3 Fe, O 15.0 mg/m3 Total Dust, O 5.0 mg/m3 Respirable Dust
Titanium dioxide	13463-67-7	None	O 15.0 mg/m3 Total Dust, D 10.0 mg/m3 8 & 12 hour TWA Total Dust, D 5.0 mg/m3 8 & 12 hour TWA Respirable Dust, A None
Xylene	1330-20-7	8.0@25.0 °C	A 150.0 ppm 15 min STEL, A 100.0 ppm, O 100.0 ppm, D 100.0 ppm 8 & 12 hour TWA

*A=ACGIH, O=OSHA, D=DuPont, S=Suppliers. Limits are 8 hour TWA unless otherwise specified. Vapor pressure @ 20° C unless otherwise noted.
D=DuPont, Results obtained from E. I. du Pont de Nemours and Company.

3. Hazards identification

Potential Health Effects:

Inhalation:

May cause nose and throat irritation. May cause nervous system depression characterized by the following progressive steps: headache, dizziness, nausea, staggering gait, confusion, unconsciousness. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ingestion:

May result in gastrointestinal distress.

Skin or eye contact:

May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Other Potential Health Effects in addition to those listed above:

Carbon black

Is an IARC, NTP or OSHA carcinogen. Has shown carcinogenic activity in laboratory animals at high doses. Significance to man is unknown. The following medical conditions may be aggravated by exposure: asthma, respiratory disease. WARNING: This chemical is known to the State of California to cause cancer.

Ethylbenzene

Is an IARC, NTP or OSHA carcinogen. Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. Studies in laboratory animals have shown reproductive, embryotoxic and developmental effects. WARNING: This chemical is known to the State of California to cause cancer.

Propylene glycol monomethyl ether acetate

Recurrent overexposure may result in liver and kidney injury.

Quartz-crystalline silica

Is an IARC, NTP or OSHA carcinogen. Repeated overexposure to crystalline silica may lead to x-ray changes and chronic lung disease. Inhalation of high dust concentrations may cause: breathing difficulties, lung injury. WARNING: This chemical is known to the State of California to cause cancer.

Red iron oxide light

Long- term respiratory exposure of iron oxide may result in deposition of particles in the lung (benign siderosis).

Titanium dioxide

Is an IARC, NTP or OSHA carcinogen. In a lifetime inhalation test, lung cancers were found in some rats exposed to 250 mg/m3 respirable titanium dust. Analysis of the titanium dioxide concentrations in the rat's lungs showed that the lung clearance mechanism was overwhelmed and that the results at the massive 250 mg/m3 level are not relevant to the workplace. Results of a DuPont epidemiology study showed that employees who had been exposed to Titanium Dioxide were at no greater risk of developing lung cancer than were employees who had not been exposed to Titanium dioxide. No pulmonary fibrosis was found in any of the employees and no association was observed between Titanium dioxide exposure and chronic respiratory disease or x-ray abnormalities. Based on the results of this study DuPont concludes that titanium dioxide will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the workplace.'

Xylene

Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: bone marrow, cardiovascular system, central nervous system, kidneys, liver, lungs. Recurrent overexposure may result in liver and kidney injury. High exposures may produce irregular heart beats. Canada classifies Xylene as a developmental toxin as high exposures to xylenes in some animal studies have been reported to cause health effects on the developing fetus/embryo. These effects were often at levels toxic to the adult animal. The significance of these effects to humans is not known. Repeated or prolonged skin contact may cause any of the following: irritation, dryness, cracking of the skin.

4. First aid measures

First Aid Procedures:

Inhalation:

If affected by inhalation of vapor or spray mist, move to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing difficulty persists, or occurs later, consult a physician.

Ingestion:

In the unlikely event of ingestion, DO NOT INDUCE VOMITING. Call a physician immediately and have names of ingredients available.

Skin or eye contact:

In case of eye contact, immediately flush with plenty of water for at least 15 minutes; call a physician. In case of skin contact, wash thoroughly with soap and water. If irritation occurs, contact a physician.

5. Firefighting measures

Flash Point (Closed Cup):

See Section 11 for exact values.

Flammable Limits: LFL 0 % UFL 0 %

Extinguishing Media:

Universal aqueous film-forming foam, carbon dioxide, dry chemical.

Fire Fighting Procedures:

Full protective equipment, including self-contained breathing apparatus, is recommended. Water from fog nozzles may be used to prevent pressure build-up.

Fire and Explosion Hazards:

For flammable liquids, vapor/air will ignite when an ignition source is present. In other cases, when heated above the flash point, emits flammable vapors which, when mixed with air, can burn or be explosive. Fine mists or sprays may be flammable at temperatures below the flash point.

6. Accidental release measures

Procedures for cleaning up spills or leaks:

Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. If material does not contain or is not mixed with an isocyanate activator/hardener: Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C), eye protection, gloves and protective clothing. Confine, remove with inert absorbent, and dispose of properly.

Ecological information:

There is no data available on the product. The product should not be allowed to enter drains, water courses or the soil.

7. Handling and storage

Precautions to be taken in handling and storing:

Observe label precautions. If combustible (flashpoint between 38-93 deg C or 100 - 200 deg F), keep away from heat, sparks and flame. If flammable (flashpoint less than 38 deg C or 100 deg F), also keep away from static discharges and other sources of ignition. If material is extremely flammable (flashpoint less than - 8 deg C or 20 deg F) or flammable, VAPORS MAY IGNITE EXPLOSIVELY OR CAUSE FLASH FIRE, respectively. Vapors may spread long distances. Prevent buildup of vapors. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 49 deg C or 120 deg F. If product is waterbased, do not freeze.

Other precautions:

If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Handling and processing operations should be conducted in accordance with best practices (e.g.NFPA-654).

8. Exposure controls/personal protection

Ventilation:

Provide sufficient ventilation in volume and pattern to keep contaminants below applicable exposure limits.

Respiratory protection:

Do not breathe vapors or mists. If this product contains isocyanates or is used with an isocyanate activator/hardener, wear a positive-pressure, supplied- air respirator (NIOSH approved TC-19C) during spray application (or brush and roll application in poorly ventilated areas) and until all vapors and spray mist are exhausted. For mixing and brush and roll application in well ventilated areas or, if the product does not contain or is not mixed with an isocyanate activator/hardener, a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH TC-23C) may be used until all vapors are exhausted. In addition, for spray application when product does not contain or is not mixed with an isocyanate activator/hardener, a particulate filter (NIOSH TC-84A) is needed with the organic vapor cartridges until all vapors and spray mist are exhausted. Follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area. Individuals with history of lung or breathing problems or prior reaction to isocyanates should not use or be exposed to vapor or spray mist if product contains or is mixed with isocyanate activators/hardeners.

Protective equipment:

Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Skin and body protection:

Neoprene gloves and coveralls are recommended.

Desirable in all industrial situations. Goggles are preferred to prevent eye irritation. If safety glasses are substituted, include splash guard or side shields.

9. Physical and chemical properties

Evaporation rate	Slower than Ether
Water solubility	NIL
Vapour density	Heavier than air
Approx. Boiling Range (°C)	136 – 141 °C
Approx. Freezing Range (°C)	Not applicable.
Gallon Weight (lbs/gal)	9.19663 - 16.3904
Specific Gravity	1.10 - 1.96
Percent Volatile By Volume	38.40 - 60.94
Percent Volatile By Weight	18.50 - 52.40
Percent Solids By Volume	39.06 - 61.60
Percent Solids By Weight	47.60 - 81.50

10. Stability and reactivity

Stability:

Stable

Incompatibility (materials to avoid):

None reasonably foreseeable

Hazardous decomposition products:

CO, CO₂, smoke, and oxides of any heavy metals that are reported in "Composition, Information on Ingredients" section.

Hazardous Polymerization:

Will not occur.

Sensitivity to Static Discharge:

For flammable materials (flashpoint less than 38 deg C or 100 deg F) and combustibles (flashpoint between 38- 93 deg C or 100-200 deg F) if heated above the flashpoint, solvent vapors in air may explode if static grounding and bonding is not used during transfer of this product.

Sensitivity to Mechanical Impact:

None known.

11. Additional Information

4000P(TW)™ Aldehyde resin(16.1%), Amorphous silica(2.2%), Dipropylene glycol methyl ether(16.0%), Ethylbenzene(0.9%*[@]), Titanium dioxide(63.2%) **GAL WT: 16.21 WT PCT SOLIDS: 81.50 VOL PCT SOLIDS: 61.60 SOLVENT DENSITY: 7.81 VOC LE: 3.0 VOC AP: 3.0 FLASH POINT: 100 °F - 141 °F H: 1 F: 2 R: 0 OSHA STORAGE: II TSCA STATUS: In Compliance PHOTOCHEMICALLY REACTIVE: NO**

4009P(OY)™ Aldehyde resin(32.0%), Azo yellow pigment(19.0%), Barium sulfate(15.7%), Dipropylene glycol methyl ether(28.9%), Ethylbenzene(0.5%*[@]), Titanium dioxide(3.3%) **GAL WT: 10.64 WT PCT SOLIDS: 70.20 VOL PCT SOLIDS: 59.81 SOLVENT DENSITY: 7.89 VOC LE: 3.2 VOC AP: 3.2 FLASH POINT: 100 °F - 141 °F H: 1 F: 2 R: 0 OSHA STORAGE: II TSCA STATUS: In Compliance PHOTOCHEMICALLY REACTIVE: NO**

4014P(MY)™ Aldehyde resin(18.2%), Ethylbenzene(0.2%*[@]), Magnesite(1.0%), Miscellaneous pigments(1.5%), Pigment yellow 151(10.2%), Pigment yellow 83(6.1%), Propylene glycol monomethyl ether acetate(49.8%), Titanium dioxide(9.1%), Xylene(1.3%*[@]) **GAL WT: 11.27 WT PCT SOLIDS: 63.02 VOL PCT SOLIDS: 47.72 SOLVENT DENSITY: 7.95 VOC LE: 4.2 VOC AP: 4.2 FLASH POINT: 100 °F - 141 °F H: 2 F: 2 R: 0 OSHA STORAGE: II TSCA STATUS: In Compliance PHOTOCHEMICALLY REACTIVE: NO**

4023P(PG)™ Aldehyde resin(25.5%), Barium sulfate(22.3%), Dipropylene glycol methyl ether(32.0%), Ethylbenzene(0.1%*[@]), Hydrous magnesium silicate(1.4%), Phthalocyanine green pigment(17.8%) **GAL WT: 11.52 WT PCT SOLIDS: 67.00 VOL PCT SOLIDS: 51.84 SOLVENT DENSITY: 7.90 VOC LE: 3.8 VOC AP: 3.8 FLASH POINT: 100 °F - 141 °F H: 1 F: 2 R: 0 OSHA STORAGE: II TSCA STATUS: In Compliance PHOTOCHEMICALLY REACTIVE: NO**

4034P(PB)™ Aldehyde resin(23.8%), Dipropylene glycol methyl ether(51.7%), Dolomite(1.0%), Ethylbenzene(0.1%*[@]), Magnesite(1.0%), Phthalocyanine blue pigment(20.2%) **GAL WT: 9.20 WT PCT SOLIDS: 47.60 VOL PCT SOLIDS: 39.06 SOLVENT DENSITY: 7.92 VOC LE: 4.8 VOC AP: 4.8 FLASH POINT: 100 °F - 141 °F H: 1 F: 2 R: 0 OSHA STORAGE: II TSCA STATUS: In Compliance PHOTOCHEMICALLY REACTIVE: NO**

4038P(QV)™ Aldehyde resin(28.7%), Barium sulfate(28.2%), Dipropylene glycol methyl ether(28.6%), Ethylbenzene(0.3%*[@]), Quinacridone pigment(13.0%) **GAL WT: 11.56 WT PCT SOLIDS: 70.90 VOL PCT SOLIDS: 57.39 SOLVENT DENSITY: 7.90 VOC LE: 3.4 VOC AP: 3.4 FLASH POINT: 100 °F - 141 °F H: 1 F: 2 R: 0 OSHA STORAGE: II TSCA STATUS: In Compliance PHOTOCHEMICALLY REACTIVE: NO**

4045P(RO)™ Aldehyde resin(17.1%), Dipropylene glycol methyl ether(21.2%), Ethylbenzene(0.1%*[@]), Iron oxide(35.5%), Red iron oxide light(24.7%) **GAL WT: 16.39 WT PCT SOLIDS: 78.20 VOL PCT SOLIDS: 54.77 SOLVENT DENSITY: 7.89 VOC LE: 3.6 VOC AP: 3.6 FLASH POINT: 100 °F - 141 °F H: 1 F: 2 R: 0 OSHA STORAGE: II TSCA STATUS: In Compliance PHOTOCHEMICALLY REACTIVE: NO**

4048P(QR)™ Aldehyde resin(30.0%), Barium sulfate(24.0%), Dipropylene glycol methyl ether(31.0%), Ethylbenzene(0.3%*[@]), Hydrous magnesium silicate(1.1%), Quinacridone pigment(13.4%) **GAL WT: 10.91 WT PCT SOLIDS: 68.50 VOL PCT SOLIDS: 56.52 SOLVENT DENSITY: 7.91 VOC LE: 3.4 VOC AP: 3.4 FLASH POINT: 100 °F - 141 °F H: 1 F: 2 R: 0 OSHA STORAGE: II TSCA STATUS: In Compliance PHOTOCHEMICALLY REACTIVE: NO**

4066P(UO)™ Aldehyde resin(20.1%), Barium sulfate(29.5%), Ethylbenzene(0.2%*[@]), Miscellaneous pigments(1.0%), Monoazo pigment(4.7%), Pigment orange 34(10.0%), Propylene glycol monomethyl ether acetate(32.6%), Xylene(1.2%*[@]) **GAL WT: 11.69 WT PCT SOLIDS: 65.98 VOL PCT SOLIDS: 50.98 SOLVENT DENSITY: 8.25 VOC LE: 4.0 VOC AP: 4.0 FLASH POINT: 100 °F - 141 °F H: 1 F: 2 R: 0 OSHA STORAGE: II TSCA STATUS: In Compliance PHOTOCHEMICALLY REACTIVE: NO**

4075P(YO)™ Aldehyde resin(21.5%), Barium sulfate(6.7%), Dipropylene glycol methyl ether(24.5%), Ethylbenzene(0.1%*[@]), Iron hydroxide(47.2%) **GAL WT: 14.25 WT PCT SOLIDS: 75.40 VOL PCT SOLIDS: 55.68 SOLVENT DENSITY: 7.91 VOC LE: 3.5 VOC AP: 3.5 FLASH POINT: 100 °F - 141 °F H: 1 F: 2 R: 0 OSHA STORAGE: II TSCA STATUS: In Compliance PHOTOCHEMICALLY REACTIVE: NO**

4084P(BU)™ Aldehyde resin(25.0%), Barium sulfate(10.0%), Dipropylene glycol methyl ether(24.4%), Ethylbenzene(0.1%*[@]), Iron oxide(22.2%), Limestone (calcium carbonate)(6.0%), Manganese (iv) oxide(6.0%*[@]), Quartz-crystalline silica(6.1%) **GAL WT: 13.23 WT PCT SOLIDS: 75.30 VOL PCT SOLIDS: 58.73 SOLVENT DENSITY: 7.90 VOC LE: 3.3 VOC AP: 3.3 FLASH POINT: 100 °F - 141 °F H: 3 F: 2 R: 0 OSHA STORAGE: II TSCA STATUS: In Compliance PHOTOCHEMICALLY REACTIVE: NO**

4091P(LB)™ Aldehyde resin(21.0%), Barium sulfate(30.3%), Carbon black(16.5%), Dipropylene glycol methyl ether(28.5%), Ethylbenzene(0.8%*[@]), Hydrous magnesium silicate(1.2%) **GAL WT: 12.06 WT PCT SOLIDS: 69.00 VOL PCT SOLIDS: 52.38 SOLVENT DENSITY: 7.85 VOC LE: 3.7 VOC AP: 3.7 FLASH POINT: 100 °F - 141 °F H: 1 F: 2 R: 0 OSHA STORAGE: II TSCA STATUS: In Compliance PHOTOCHEMICALLY REACTIVE: NO**

Footnotes:

TSCA: in compliance In compliance with TSCA Inventory requirements for commercial purposes.

ACGIH American Conference of Governmental Industrial Hygienists.

IARC International Agency for Research on Cancer.

NTP National Toxicology Program.

OSHA Occupational Safety and Health Administration.

PNOR Particles not otherwise regulated.

PNOC Particles not otherwise classified.

STEL Short term exposure limit.

TWA Time-weighted average.

* VOC less exempt (theoretical) and VOC as packaged (theoretical) are based upon the VOC of the packaged material at the point of manufacture.

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* = Section 313 Supplier Notification: These chemicals are subject to the reporting requirements of Section 313 of the Emergency planning and Right-to-Know act of 1986 and of 40 CFR 372.

@ = Listed as a Clean Air Act Hazardous Air Pollutant.

= EPCRA Section 302 - Extremely hazardous substances.

Notice:

The information on this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Product Manager: Refinish Sales

Prepared by: Y. B. Yarbrough