DuPont Performance Coatings
MATERIAL SAFETY DATA SHEET
DuPont™ Black Etch Primer A-4119S™
1K Self-Etching Aerosol Primer

SECTION 1 - Product and Company Identification

Manufacturer: E.I. duPont de Nemours & Co.
Dupont Performance Coatings
Wilmington, DE, 19898

Telephone:
Product Information: (800) 441-7515
Medical Emergency: (800) 441-3637
Transportation Emergency: (800) 424-9300 (CHEMTREC)

Product: **DuPont™ Black Etch Primer A-4119S™**

DOT Shipping Name: See DOT addendum.

Hazardous Materials Information: See Section 10.

SECTION 2 - Composition, Information on Ingredients

INGREDIENTS	CAS#	VAPOR PRESSURE	EXPOSURE LIMITS
ACETONE	67-64-1	247.0@68.0°F	A 750.0 ppm 15 min STEL A 500.0 ppm O 1000.0 ppm D 500.0 ppm 8 & 12 hour TWA
AMORPHOUS SILICA-FUMED	68611-44-9	None	D 1.0 mg/m^3 Respirable Dust A 2.0 mg/m^3 Respirable Dust O None
BARIUM SULFATE	7727-43-7	None	A 10.0 mg/m^3 Total Dust D 10.0 mg/m^3 Total Dust O 15.0 mg/m^3 Total Dust A 5.0 mg/m^3 Respirable Dust O 5.0 mg/m^3 Respirable Dust
BISPHENOL-EPICHLOROHYDRIN TYPE POLYMER	25068-38-6	2.1	A None O None
BLACK IRON OXIDE	1317-61-9	None	O 15.0 mg/m^3 A 10.0 mg/m^3 inhalable dust
BUTANE	106-97-8	None	A 1000.0 ppm O None
BUTYL ACETATE	123-86-4	10.0	A 200.0 ppm 15 min STEL A 150.0 ppm O 150.0 ppm
CARBON BLACK	1333-86-4	None	A 3.5 mg/m^3 O 3.5 mg/m^3 D 0.5 mg/m^3 8 & 12 hour TWA
ETHYLBENZENE	100-41-4	7.0	A 125.0 ppm 15 min STEL A 100.0 ppm O 100.0 ppm D 25.0 ppm 8 & 12 hour TWA
LIQUIFIED COMPRESSED GAS	68476-85-7	None	A 1000.0 ppm O 1000.0 ppm
N-BUTYL ALCOHOL	71-36-3	5.6@68.0°F	D 50.0 ppm 15 min TWA A 20.0 ppm D 25.0 ppm O 100.0 ppm
N-PROPANOL	71-23-8	19.0	O 250.0 ppm 15 min STEL A 400.0 ppm 15 min STEL D 200.0 ppm A 200.0 ppm Skin O 200.0 ppm Skin
POLYVINYL BUTYRAL RESIN	68648-78-2	None	A None O None
PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE	108-65-6	3.8	D 10.0 ppm 8 & 12 hour TWA A None O None
TALC MICRONIZED	Not Avail	None	A None O None

*A=ACGIH, O=OSHA, D=DuPont, S=Suppliers. Limits are 8 hour TWA unless otherwise specified. Vapor pressure @25°C unless otherwise noted.

SECTION 3 - Hazards Information

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. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.
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:

ACETONE
The following medical conditions may be aggravated by exposure: lung disease, eye disorders, skin disorders. Overexposure may cause damage to any of the following organs/systems: blood, central nervous system, eyes, kidneys, liver, respiratory system, skin.

BISPHENOL-EPICHLOROHYDRIN TYPE POLYMER
The following medical conditions may be aggravated by exposure: skin disorders. Vapor may be irritating at elevated temperatures. Repeated or prolonged skin contact may cause any of the following: allergic skin rash.

BUTANE
Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: cardiovascular system. Eye contact may cause any of the following: swelling, reversible eye injury. This gas is a simple asphyxiant, which at high concentrations can reduce the amount of oxygen available for breathing.

BUTYL ACETATE
May cause abnormal liver function. The following medical conditions may be aggravated by exposure: respiratory system. Tests for embryotoxic activity in animals has been inconclusive. Rats exposed to very high airborne levels have exhibited high frequency hearing deficits. The significance of this to man is unknown. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother.

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.

LIQUIFIED COMPRESSED GAS
May possibly cause modest initial irritation, followed in hours by severe shortness of breath, requiring prompt medical attention. May cause central nervous system effects such as temporary muscular weakness and loss of coordination. Contact may cause skin burns. Can irritate or burn eyes.

N-BUTYL ALCOHOL
May cause abnormal blood forming function with anemia. Liquid splashes in the eye may result in chemical burns.

N-PROPANOL
Has shown mutagenic activity in laboratory cell culture tests. Has shown carcinogenic activity in laboratory animals at high doses. Significance to man is unknown. May cause abnormal liver function. Can be absorbed through the skin in harmful amounts.

POLYVINYL BUTYRAL RESIN
Increased susceptibility to the effects of this material may be observed in people with preexisting disease of any of the following: eyes, respiratory system, skin.

PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE
Recurrent overexposure may result in liver and kidney injury.

SECTION 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:
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.

SECTION 5 - Firefighting Measures

Flash Point (Closed Cup) See Section 11 for exact values.
Flammable limits LFL 1.4 % UFL 12.8 %
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 & 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.

SECTION 6 - Accidental Release Measures

Steps to be taken in case material is released or spilled:
Ventilate area. Remove sources of ignition. Prevent skin and eye contact and breathing of vapor. 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.

SECTION 7 - Handling and Storage

Precautions to be taken in handling and storing:
Observe label precautions. If combustible (flashpoint between 100 - 200°F), keep away from heat, sparks and flame. If flammable (flashpoint less than 100°F), also keep away from static discharges and other sources of ignition. If material is extremely flammable (flashpoint less than 20°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 120°F. If product is waterbased, do not freeze. CONTENTS UNDER PRESSURE. Clean nozzle and cap container after each use. Do not puncture or incinerate (burn) container. Exposure to heat or prolonged exposure to sun may cause bursting.

Other precautions:
If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved respirator or appropriate ventilation, and gloves.

SECTION 8 - Exposure Controls or Personal Protection

Engineering controls and work practices:

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

Respiratory:
Do not breathe vapors or mists. Wear a properly fitted air-purifying respirator with organic vapor cartridges (NIOSH approved TC-23C) and particulate filter (NIOSH TC-84A) during application and until all vapors and spray mists are exhausted. In confined spaces, or in situations where continuous spray operations are typical, or if proper air-purifying respirator fit is not possible, wear a positive pressure, supplied-air respirator (NIOSH TC-19C). In all cases, follow respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area.

Protective clothing:
Neoprene gloves and coveralls are recommended.

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

SECTION 9 - Physical and Chemical Properties

Evaporation Rate	Slower than Ether
Solubility in water	NIL
Vapor Density	Heavier than air
Approx. boiling range (°C)	-11 - 127 (°C)
Approx. freezing range (°C)	-73 - -73 (°C))
Gallon weight (lbs/gal)	6.90
Specific gravity	0.83
Percent volatile by volume	92.59
Percent volatile by weight	80.56
Percent solids by volume	7.41
Percent solids by weight	19.45

SECTION 10 - Stability and Reactivity

Stability: Stable
Incompatibility (materials to avoid): None reasonably foreseeable
Hazardous decomposition products:
CO, C02, 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 100°F) and combustibles (flashpoint between 100-200°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: Not Applicable

SECTION 11 - Additional Information

PRODUCT CODE INGREDIENTS (Product Specific)

A-4119S™ acetone, amorphous silica-fumed, barium sulfate, bisphenol-epichlorohydrin type polymer, black iron oxide, butane, butyl acetate, carbon black(0.1%), ethylbenzene(0.1-0.2%*@), liquified compressed gas, n-butyl alcohol(10%*), n-propanol, polyvinyl butyral resin, propylene glycol monomethyl ether acetate, talc micronized
GAL WT: 6.90 WT PCT SOLIDS:19.45 VOL PCT SOLIDS: 7.41
SOLVENT DENSITY: 6.01 VOC LE: 5.0 VOC AP: 3.3
FLASH POINT: Below 20°F H: 2 F: 3 R: 1 OSHA STORAGE: IA
TSCA STATUS: In compliance PHOTOCHEMICALLY REACTIVE: NO

Footnotes:
TSCA: in compliance = In compliance with TSCA Inventory requirements for commercial purposes.
ACGIH = American Conference of Government 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.
TM = Is a Trademark of E.I. DuPont de Nemours & Co.
* = 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.
@ = Clean Air Act Hazardous Air Pollutant.
# = EPCRA Section 302 - Extremely Hazardous Substance.

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
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