



Material Safety Data Sheet

Product Name: SOLVENT BASED TOUCH UP PAINT

ID: 1017

*** Section 1 - Chemical Product and Company Identification ***

Chemical Formula: Mixture

Other Designations: LH Polypro Tie Coat, 272-C07; LH Gaffney Black 220-919; LH Gaffney Brown, 5434D10024; LH Gaffney Green, 5434G10011; LH Gaffney Gray, 5434E10010; LH Gaffney Brittany Blue, 5434A10016; LH Gaffney Red, 5434R10010; LH Vent White, 5434W10005; LH Pebblestone Clay, 5434D10016; LH Dark Spruce, 5434G10016; LH Winestone, 5434R10014; LH Reducer, 5461C00047; LH Siding White, 5434W10210; LH Dark Navy Blue, 5434A10037; LH Cedar White, 5434W10008

Ply Gem Industries, Inc.
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Phone: 1-816-426-8200 or 1-800-788-1964

Emergency Information: USA: Chemtrec: 1-800-424-9300 or 1-703-527-3887

*** Section 2 - Hazards Identification ***

EMERGENCY OVERVIEW

Liquid. Various colors. Solvent odor. Flammable. Solvent vapors may form explosive air/vapor mixtures at room temperature.

Direct contact can cause irritation of the eyes and skin. Vapors and mists can cause irritation of the eyes and respiratory tract and central nervous system effects (nausea, dizziness and loss of coordination). Can be absorbed through the skin.

POTENTIAL HEALTH EFFECTS

The following statements summarize the health effects generally expected in cases of overexposures. User specific situations should be assessed by a qualified individual. Additional health information can be found in Section 11.

Eyes: Can cause irritation.

Skin

Direct contact can cause irritation. Prolonged or repeated contact with the skin can cause dermatitis. Can be absorbed through the skin.

Ingestion

Can cause irritation and central nervous system effects (nausea, dizziness and loss of coordination). Harmful or fatal if swallowed.

Inhalation

Can cause irritation of respiratory tract and central nervous system effects (nausea, dizziness and loss of coordination). Prolonged or repeated exposure can cause liver damage, kidney damage and reproductive harm.

Carcinogenicity and Reproductive Hazard

This product does not pose a hazard under normal conditions of consumer use.

Commercial or industrial use (frequent exposure and/or large quantities of material): Can present a cancer hazard (Ethyl benzene).

Medical Conditions Aggravated By Exposure to Product, Components or Compounds Formed During Processing

Asthma, chronic lung disease, and skin rashes.

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*** Section 3 - Composition / Information on Ingredients ***

Complete composition is provided below and may include some components classified as non-hazardous.

CAS #	Component	Percent
	Solvents^a	-
108-21-4	Isopropyl acetate	0-40
110-19-0	Isobutyl acetate	0-40
67-64-1	Acetone	0-30
67-63-0	Isopropyl alcohol	0-30
64742-89-8	Naphtha, light aliphatic	0-30
111-76-2	2-Butoxyethanol	0-20
107-98-2	Propylene glycol monomethyl ether (PGME)	0-20
64742-88-7	Naphtha, medium aliphatic	0-8
64742-95-6	Naphtha, light aromatic	0-8
71-36-3	n-Butyl alcohol	0-8
1330-20-7	Xylenes	0-4
88230-35-7	Oxo-hexyl acetate	0-4
95-63-6	1,2,4-Trimethyl benzene	0-4
97-85-8	Isobutyl isobutyrate	0-1.5
100-41-4	Ethyl benzene	0-1
	Pigments^a	-
13463-67-7	Titanium dioxide	0-30
1309-37-1	Iron oxide	0-8
1333-86-4	Carbon black	0-4
Not Available	Solids^a	-
Not Available	Resins	5-15
14807-96-6	Talc	0-8

Component Related Regulatory Information

Some component information may be found under the following: Glycol ethers.

Component Information

^a - The exact composition will vary. Unless additional information is available, the user should assume that all potential ingredients are present.

*** Section 4 - First Aid Measures ***

First Aid: Eyes

Flush eyes with plenty of water or saline for at least 15 minutes. Consult a physician.

First Aid: Skin

Remove contaminated clothing. Wash skin with soap and water for at least 15 minutes. Consult a physician if irritation persists.

First Aid: Ingestion

If swallowed, dilute by drinking large amounts of water. *Never give anything by mouth to a convulsing or unconscious person.* Do **not** induce vomiting. Get emergency medical care. Contact the local Poison Control Center, if available.

First Aid: Inhalation

Remove to fresh air. If unconscious or severely injured, check for clear airway, breathing and presence of pulse. Perform CPR if there is no pulse or respiration. Consult a physician.

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*** Section 5 - Fire Fighting Measures ***

Flammable/Combustible Properties:

Flammable.

Fire/Explosion

Solvent vapors may form explosive mixtures in air at room temperature. Vapors are heavier than air and may travel considerable distances along the ground to a source of ignition. Closed containers may burst or explode when exposed to extreme heat. Explosions can cause cans to "rocket" into non-burning areas which can spread the fire beyond the area of origin. Material and rags contaminated with solvents can be combustible.

Extinguishing Media

Use Class B extinguishers [Carbon Dioxide, Dry Chemical (ABC or BC), or universal Aqueous Film Forming Foam (AFFF)] designed to extinguish Class I flammable liquid fires. Water spray may be ineffective and may spread flames. If water is used, fog nozzles are preferable. Use water spray to minimize vapors and cool containers exposed to heat or flame. Move undamaged containers away from heat or flame, if possible. Water spray may be used to flush spills away from ignition sources.

Fire Fighting Equipment/Instructions

Fire fighters should wear NIOSH approved, positive pressure, self-contained breathing apparatus and full protective clothing when appropriate.

*** Section 6 - Accidental Release Measures ***

Small/Large Spill

Use adequate ventilation to reduce vapor concentration. Avoid eye and skin exposures. Avoid all ignition sources around spill. Absorb with absorbent material.

*** Section 7 - Handling and Storage ***

Handling/Storage

Avoid eye and skin contact. Use adequate ventilation to reduce vapor concentration. Prohibit smoking. Store out of reach of children. Store away from heat, sparks, flames, oxidizers, and other incompatible substances. Do not store above 120°F (49°C). For large quantities, store in buildings designed and protected for storage of Class 1B combustible liquids.

Contaminated rags should be stored in a self-extinguishing or other type of metal waste container to protect against fires from spontaneous combustion.

*** Section 8 - Exposure Controls / Personal Protection ***

Engineering Controls

Generally not required under recommended conditions of use.

If significant levels of dusts or vapors are generated: Use with adequate ventilation to meet the limits listed in Section 8, Exposure Guidelines.

Personal Protective Equipment

Respiratory Protection

Generally not required under recommended conditions of use.

If significant levels of dusts or vapors are generated: Use NIOSH-approved respiratory protection as specified by an Industrial Hygienist or other qualified professional if concentrations exceed the limits listed in Section 8, Exposure Guidelines. Suggested respiratory protection: Organic vapor cartridge

Eye Protection: Not required under recommended conditions of use.

Skin Protection: Not required under recommended conditions of use.

Exposure Guidelines

A: General Product Information: No information available for product.

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B: Component Exposure Limits

Isopropyl acetate (108-21-4)

ACGIH 100 ppm TWA
ACGIH 200 ppm STEL
OSHA 250 ppm TWA; 950 mg/m³ TWA

Isobutyl acetate (110-19-0)

ACGIH 150 ppm TWA
OSHA 150 ppm TWA; 700 mg/m³ TWA

Acetone (67-64-1)

ACGIH 500 ppm TWA
ACGIH 750 ppm STEL
OSHA 1000 ppm TWA; 2400 mg/m³ TWA

Isopropyl alcohol (67-63-0)

ACGIH 200 ppm TWA
ACGIH 400 ppm STEL
OSHA 400 ppm TWA; 980 mg/m³ TWA

2-Butoxyethanol (111-76-2)

ACGIH 20 ppm TWA
OSHA prevent or reduce skin absorption
OSHA 50 ppm TWA; 240 mg/m³ TWA

Propylene glycol monomethyl ether (PGME) (107-98-2)

ACGIH 100 ppm TWA
ACGIH 150 ppm STEL

n-Butyl alcohol (71-36-3)

ACGIH 20 ppm TWA
OSHA 100 ppm TWA; 300 mg/m³ TWA

Xylenes (1330-20-7)

ACGIH 100 ppm TWA
ACGIH 150 ppm STEL
OSHA 100 ppm TWA; 435 mg/m³ TWA

Ethyl benzene (100-41-4)

ACGIH 100 ppm TWA
ACGIH 125 ppm STEL
OSHA 100 ppm TWA; 435 mg/m³ TWA

Titanium dioxide (13463-67-7)

ACGIH 10 mg/m³ TWA
OSHA 15 mg/m³ TWA (total dust)

Iron oxide (1309-37-1)

ACGIH 5 mg/m³ TWA (respirable fraction)
OSHA 10 mg/m³ TWA

Carbon black (1333-86-4)

ACGIH 3.5 mg/m³ TWA
OSHA 3.5 mg/m³ TWA

Talc (14807-96-6)

ACGIH 2 mg/m³ TWA (respirable fraction, particulate matter containing no asbestos and < 1% crystalline silica)
OSHA 20 mppcf TWA (if 1% quartz or more, use quartz limit)

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*** Section 9 - Physical & Chemical Properties ***

Physical State: Liquid	Appearance: Various colors
Boiling Point: 180-374°F (82-190°C)	Melting Point: Not determined
Vapor Pressure: 1.8 mm Hg (aliphatic naphtha)	Vapor Density: Heavier than air
Solubility in Water: Soluble	Specific Gravity: Not determined
pH Level: Not applicable	Odor: Solvent
Odor Threshold: Not determined	Octanol-Water Coefficient: Not determined
Flash Point 1°F (-17°C)	UFL 12.0
LFL 0.9	Flamm Class Flammable liquid - Class IB

*** Section 10 - Chemical Stability & Reactivity Information ***

Stability: Stable under normal conditions of use, storage, and transportation.

Conditions to Avoid

Avoid exposures to sparks, open flames, hot surfaces and all other sources of heat or ignition.

Incompatibility: Strong oxidizers and strong acids.

Hazardous Decomposition

Includes carbon monoxide, carbon dioxide, oxides of nitrogen and partially oxidized hydrocarbons.

Hazardous Polymerization: Will not occur.

*** Section 11 - Toxicological Information ***

Health Effects Associated with Individual Ingredients

Solvents Can cause irritation of eyes, mucous membranes, skin and respiratory tract. Skin contact (prolonged or repeated): Can cause defatting of the skin and dermatitis. Acute overexposures: Can cause headaches, drowsiness (narcosis), liver damage, kidney damage and central nervous system effects (nausea, dizziness, loss of coordination and loss of consciousness). Chronic overexposures: Can cause loss of coordination, reduction in reaction times and central nervous system damage.

2-Butoxyethanol (Butyl cellosolve, EGMBE) Can cause irritation of eyes, skin and respiratory tract. Skin contact: Can be absorbed through the skin in toxic amounts. Acute and chronic overexposures: Can cause central nervous system effects (nausea, dizziness and loss of consciousness), the accumulation of fluid in the lungs (pulmonary edema), blood cell damage, kidney damage and liver damage.

Acetone Can cause irritation of eyes, mucous membranes, skin and respiratory tract. Acute and chronic overexposures: Can cause central nervous system effects (nausea, dizziness and loss of consciousness).

Isopropanol (Isopropyl alcohol) Can cause severe irritation and corneal damage to eyes. Can cause skin irritation. Skin contact: Can cause non-allergic dermatitis. Can be absorbed through the skin. Acute overexposures: Can cause central nervous system effects (nausea, dizziness and loss of coordination) and drowsiness (narcosis). Chronic overexposures: Can cause cardiovascular system effects and kidney damage.

1-Methoxy-2-propanol (Propylene glycol monomethyl ether, PGME) Can cause irritation of eyes, skin and respiratory tract. Skin contact: Can be absorbed through the skin in toxic amounts. Acute overexposures: Can cause central nervous system effects (nausea, dizziness and loss of consciousness). Chronic overexposures: Can cause liver damage and kidney damage.

Butyl alcohol (Butanol) Can cause irritation of eyes, skin and respiratory tract. Skin contact: Can be absorbed through the skin. Acute overexposures: Can cause central nervous system effects (nausea, dizziness and loss of consciousness), blurred vision and corneal damage. Chronic overexposures: Can cause inner ear damage resulting in vertigo (dizziness) and hearing loss.

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Xylene Can cause irritation of eyes, mucous membranes, skin and respiratory tract. Skin contact: Can be absorbed through the skin. Acute overexposures: Can cause central nervous system effects (nausea, dizziness, loss of coordination and loss of consciousness), coma and death. Can pass through the placenta. Chronic overexposures: Can cause reversible damage to the eyes, memory loss, abnormal heart rhythms (arrhythmia), liver damage, kidney damage, fetal toxicity and reproductive harm.

Trimethyl benzene Can cause irritation of eyes, skin and upper respiratory tract. Acute overexposures: Can cause bronchitis, central nervous system effects (nausea, dizziness, loss of coordination and loss of consciousness) and death. Chronic overexposures: Can cause asthma-like bronchitis, blood cell damage and blood disorders. Additional information: Can pass through the placenta.

Ethyl benzene Can cause irritation of eyes, skin and respiratory tract. Acute overexposures: Can cause central nervous system effects (nausea, dizziness and loss of coordination). Chronic overexposures: Can cause central nervous system damage, liver damage, kidney damage and reproductive harm. IARC/NTP: Listed as possibly carcinogenic to humans by IARC (Group 2B)*. The NTP reports clear evidence for carcinogenicity in some experimental animals. Additional information: Studies with experimental animals by inhalation have found kidney cancer, liver cancer, lung cancer and testicular cancer.

When the paint is dried and cured, the **colorants/pigments** are bound into the resin and will not be released through skin contact or under anticipated conditions of use. However, if the cured material is processed in such a manner (i.e., grinding) that large quantities of fine dusts are generated or the cured material is burned, a potential for exposure to dust containing the colorants/pigments may be created.

Titanium dioxide Can cause irritation of eyes and respiratory tract. Chronic overexposures: Can cause chronic bronchitis. IARC/NTP: Listed as possibly carcinogenic to humans by IARC (Group 2B)*.

Iron oxide Chronic overexposures: Can cause benign lung disease (siderosis). Ingestion: Can cause irritation of gastrointestinal tract, bleeding, changes in the pH of the body fluids (metabolic acidosis) and liver damage.

Carbon black Can cause mechanical irritation of eyes, skin and upper respiratory tract. Chronic overexposures: Can cause chronic bronchitis and lung disease. IARC/NTP: Listed as possibly carcinogenic to humans by IARC (Group 2B)*. Additional information: Studies with experimental animals (rats) by inhalation have found lung tumors and skin tumors.

Talc (asbestos-free and <1% silica) Can cause irritation of eyes, skin and upper respiratory tract. Chronic overexposures: Can cause lung damage.

Acute Toxicity of Ingredients/Formed Compounds

A: General Product Information: No information available for product.

B: Component Analysis - LD50/LC50

Isopropyl acetate (108-21-4)

Oral LD50 Rat: 6750 mg/kg; Dermal LD50 Rabbit: >20000 mg/kg

Isobutyl acetate (110-19-0)

Oral LD50 Rat: 13400 mg/kg; Dermal LD50 Rabbit: >5000 mg/kg

Acetone (67-64-1)

Inhalation LC50 Rat: 76 mg/L/4H; Oral LD50 Rat: 1800 mg/kg; Dermal LD50 Rabbit: 20000 mg/kg

Isopropyl alcohol (67-63-0)

Inhalation LC50 Rat: 72.6 mg/L/4H; Oral LD50 Rat: 4396 mg/kg; Dermal LD50 Rat: 12800 mg/kg; Dermal LD50 Rabbit: 12800 mg/kg

Naphtha, light aliphatic (64742-89-8)

Oral LD50 Rat: 5000 mg/kg; Dermal LD50 Rabbit: 3000 mg/kg

2-Butoxyethanol (111-76-2)

Inhalation LC50 Rat: 2.21 mg/L/4H; Inhalation LC50 Rat: 450 ppm/4H; Oral LD50 Rat: 470 mg/kg; Dermal LD50 Rat: 2270 mg/kg; Dermal LD50 Rabbit: 220 mg/kg

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Propylene glycol monomethyl ether (PGME) (107-98-2)

Inhalation LC50 Rat: 54.6 mg/L/4H; Inhalation LC50 Rat: >24 mg/L/1H; Oral LD50 Rat: 5200 mg/kg; Dermal LD50 Rabbit: 13000 mg/kg

Naphtha, medium aliphatic (64742-88-7)

Inhalation LC50 Rat: >5.28 mg/L/4H; Oral LD50 Rat: >5000 mg/kg; Dermal LD50 Rabbit: 3000 mg/kg

Naphtha, light aromatic (64742-95-6)

Inhalation LC50 Rat: >5.2 mg/L/4H; Inhalation LC50 Rat: 3400 ppm/4H; Oral LD50 Rat: 8400 mg/kg; Dermal LD50 Rabbit: >2000 mg/kg

n-Butyl alcohol (71-36-3)

Inhalation LC50 Rat: >17.7 mg/L/4H; Inhalation LC50 Rat: 8000 ppm/4H; Oral LD50 Rat: 790 mg/kg; Dermal LD50 Rabbit: 3400 mg/kg

Xylenes (1330-20-7)

Inhalation LC50 Rat: 5000 ppm/4H; Oral LD50 Rat: 4300 mg/kg; Dermal LD50 Rabbit: >1700 mg/kg

1,2,4-Trimethyl benzene (95-63-6)

Inhalation LC50 Rat: 18 g/m³/4H; Oral LD50 Rat: 3400 mg/kg; Dermal LD50 Rabbit: >3160 mg/kg

Isobutyl isobutyrate (97-85-8)

Oral LD50 Rat: 12800 mg/kg; Dermal LD50 Rabbit: >8600 mg/kg

Ethyl benzene (100-41-4)

Inhalation LC50 Rat: 17.2 mg/L/4H; Oral LD50 Rat: 3500 mg/kg; Dermal LD50 Rabbit: 15354 mg/kg

Titanium dioxide (13463-67-7)

Oral LD50 Rat: >10000 mg/kg

Iron oxide (1309-37-1)

Oral LD50 Rat: >10000 mg/kg

Carbon black (1333-86-4)

Oral LD50 Rat: >15400 mg/kg; Dermal LD50 Rabbit: >3 g/kg

C: Formed Compound Toxicity - LD50s/LC50s

This material has no components listed.

Carcinogenicity of Ingredients

A: Ingredient Carcinogenicity - IARC/NTP

Component	CAS	IARC 1	IARC 2A	IARC 2B	IARC 3	IARC 4	NTP K	NTP RA
Isopropyl alcohol	67-63-0	No	No	No	Yes	No	No	No
2-Butoxyethanol	111-76-2	No	No	No	Yes	No	No	No
Xylenes	1330-20-7	No	No	No	Yes	No	No	No
Ethyl benzene	100-41-4	No	No	Yes	No	No	No	No
Titanium dioxide	13463-67-7	No	No	Yes	No	No	No	No
Iron oxide	1309-37-1	No	No	No	Yes	No	No	No
Carbon black	1333-86-4	No	No	Yes	No	No	No	No
Talc	14807-96-6	No	No	No	Yes	No	No	No

B: Ingredient Carcinogenicity - ACGIH

Acetone (67-64-1)

ACGIH A4 - Not Classifiable as a Human Carcinogen

Isopropyl alcohol (67-63-0)

ACGIH A4 - Not Classifiable as a Human Carcinogen

2-Butoxyethanol (111-76-2)

ACGIH A3 - Confirmed animal carcinogen with unknown relevance to humans

Xylenes (1330-20-7)

ACGIH A4 - Not Classifiable as a Human Carcinogen

Ethyl benzene (100-41-4)

ACGIH A3 - Confirmed animal carcinogen with unknown relevance to humans

Titanium dioxide (13463-67-7)

ACGIH A4 - Not Classifiable as a Human Carcinogen

Iron oxide (1309-37-1)

ACGIH A4 - Not Classifiable as a Human Carcinogen (dust and fume)

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Carbon black (1333-86-4)

ACGIH A4 - Not Classifiable as a Human Carcinogen

Talc (14807-96-6)

ACGIH A4 - Not Classifiable as a Human Carcinogen (containing no asbestos fibers); A1 - Confirmed Human Carcinogen (containing asbestos fibers)

C: Ingredient References

Isopropyl alcohol (67-63-0)

IARC Monograph 71 [1999], Supplement 7 [1987], Monograph 15 [1977]

2-Butoxyethanol (111-76-2)

IARC Monograph 88 in preparation

Xylenes (1330-20-7)

IARC Monograph 71 [1999], Monograph 47 [1989]

Ethyl benzene (100-41-4)

IARC Monograph 77 [2000]

Titanium dioxide (13463-67-7)

IARC Monograph 93 posted, Monograph 47 [1989]

Iron oxide (1309-37-1)

IARC Supplement 7 [1987], Monograph 1 [1972]

Carbon black (1333-86-4)

IARC Monograph 93 posted, Monograph 65 [1996]

Talc (14807-96-6)

IARC Monograph 93 posted (inhaled), Supplement 7 [1987], Monograph 42 [1987]

Carcinogenicity of Compounds Formed During Processing

Descriptions of IARC and NTP Classifications

IARC 1: The agent is carcinogenic to humans. There is sufficient evidence that a causal relationship existed between exposure to the agent and human cancer.

IARC 2A: The agent is probably carcinogenic to humans. Generally includes agents for which there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.

IARC 2B: The agent is possibly carcinogenic to humans. Generally includes agents for which there is limited evidence in humans and less than sufficient evidence in experimental animals.

IARC 3: The agent is not classifiable as to its carcinogenicity to humans. Generally includes agents for which there is inadequate evidence in humans and inadequate or limited evidence in experimental animals.

IARC 4: The agent is probably not carcinogenic to humans. Generally includes agents for which there is evidence suggesting lack of carcinogenicity in humans and in experimental animals.

NTP K: Known to be a human carcinogen.

NTP RA: Reasonably anticipated to be a human carcinogen.

***** Section 12 - Ecological Information *****

Ecotoxicity

A: General Product Information: No information available for product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Isopropyl acetate (108-21-4)

24 Hr EC50 Daphnia magna: 1260 mg/L

Isobutyl acetate (110-19-0)

96 Hr LC50 Lepomis macrochirus: 100 mg/L [static]; 96 Hr LC50 Pimephales promelas: 5 mg/L [static]; 48 Hr LC50 Leuciscus idus melanotus: 101 mg/L [static]; 48 Hr LC50 Leuciscus idus melanotus: 101-123 mg/L [flow-through]; 24 Hr EC50 Daphnia magna: 168 mg/L

Acetone (67-64-1)

96 Hr LC50 Oncorhynchus mykiss: 5540 mg/L [static]; 96 Hr LC50 Pimephales promelas: 6210 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 8300 mg/L [static]

15 min EC50 Photobacterium phosphoreum: 14500 mg/L

48 Hr EC50 water flea: 0.0039 mg/L; 48 Hr EC50 water flea: 12700 mg/L [Static]; 48 Hr EC50 Daphnia magna: 12600 mg/L

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Isopropyl alcohol (67-63-0)

96 Hr LC50 Pimephales promelas: 9640 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 94900 mg/L [flow-through] (29 days old); 96 Hr LC50 Pimephales promelas: 61200 mg/L [flow-through] (31 days old)
96 Hr EC50 Scenedesmus subspicatus: >1000 mg/L; 72 Hr EC50 Scenedesmus subspicatus: >1000 mg/L
5 min EC50 Photobacterium phosphoreum: 35390 mg/L; 48 Hr EC50 Daphnia magna: 13299 mg/L

Naphtha, light aliphatic (64742-89-8)

72 Hr EC50 Selenastrum capricornutum: 4700 mg/L

2-Butoxyethanol (111-76-2)

96 Hr LC50 Lepomis macrochirus: 1490 mg/L [static]
24 Hr EC50 water flea: 1720 mg/L; 24 Hr LC50 Daphnia magna: 1698-1940 mg/L

Propylene glycol monomethyl ether (PGME) (107-98-2)

96 Hr LC50 Oncorhynchus mykiss: 19202 mg/L; 96 Hr LC50 Pimephales promelas: 15886 mg/L; 96 Hr LC50 Lepomis macrochirus: 21742 mg/L; 96 Hr LC50 Leuciscus idus: 4600-10000 mg/L [static]
96 Hr EC50 water flea: 10457 mg/L

Naphtha, medium aliphatic (64742-88-7)

96 Hr LC50 Pimephales promelas: 800 mg/L [static]
96 Hr EC50 Selenastrum capricornutum: 450 mg/L
48 Hr EC50 Daphnia magna: >100 mg/L

Naphtha, light aromatic (64742-95-6)

96 Hr LC50 Oncorhynchus mykiss: 9.22 mg/L
48 Hr EC50 Daphnia magna: 6.14 mg/L

n-Butyl alcohol (71-36-3)

96 Hr LC50 Pimephales promelas: 1510 mg/L [static] (33 days old); 96 Hr LC50 Pimephales promelas: 1740 mg/L [flow-through]; 96 Hr LC50 Leuciscus idus: 1200 mg/L
96 Hr EC50 Scenedesmus subspicatus: >500 mg/L; 72 Hr EC50 Scenedesmus subspicatus: >500 mg/L
5 min EC50 Photobacterium phosphoreum: 2041.4 mg/L; 30 min EC50 Photobacterium phosphoreum: 2186 mg/L; 17 Hr EC50 Pseudomonas putida: 4400 mg/L; 24 Hr EC50 Aerobic heterotroph: 3980 mg/L
48 Hr EC50 Daphnia magna: 1983 mg/L

Xylenes (1330-20-7)

96 Hr LC50 Pimephales promelas: 13.4 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 8.05 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 16.1 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 26.7 mg/L [static]
24 hr EC50 Photobacterium phosphoreum: 0.0084 mg/L
48 Hr EC50 water flea: 3.82 mg/L; 48 Hr LC50 Gammarus lacustris: 0.6 mg/L

1,2,4-Trimethyl benzene (95-63-6)

96 Hr LC50 Pimephales promelas: 7.72 mg/L [flow-through]
48 Hr EC50 Daphnia magna: 6.14 mg/L

Ethyl benzene (100-41-4)

96 Hr LC50 Oncorhynchus mykiss: 14.0 mg/L [static]; 96 Hr LC50 Pimephales promelas: 9.09 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 150.0 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 4.2 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 32 mg/L [static]; 96 Hr LC50 Pimephales promelas: 48.5 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 9.6 mg/L [static]
72 Hr EC50 Selenastrum capricornutum: 4.6 mg/L; 96 Hr EC50 Selenastrum capricornutum: >438 mg/L
30 min EC50 Photobacterium phosphoreum: 9.68 mg/L; 24 Hr EC50 Nitrosomonas: 96 mg/L
48 Hr EC50 Daphnia magna: 1.8-2.4 mg/L

Carbon black (1333-86-4)

24 Hr EC50 Daphnia magna: >5600 mg/L

Talc (14807-96-6)

96 Hr LC50 Brachydanio rerio: >100 g/L [semi-static]

Environmental Fate

No information available for product.

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*** Section 13 - Disposal Considerations ***

Disposal Instructions

Reuse or recycle material whenever possible. Waste may be disposed of at a hazardous waste incinerator.

US EPA Waste Number & Descriptions

A: General Product Information

RCRA Hazardous Waste No.: D001 if disposed of "as is". Otherwise, characterize in accordance with applicable regulations (40 CFR 261 or state equivalent in the U.S.)

B: Component Waste Numbers

RCRA waste codes other than described under Section A may apply depending on use of product. Refer to 40 CFR 261 or state equivalent in the U.S.

*** Section 14 - Transportation Information ***

Special Transportation

	PSN #1	PSN #2	PSN #3	PSN #4
Notes:	(1)(5)(6)	(2)(3)(5)(6)	(3)(4)(5)(6)	
UN NA Number:		ID 8000	UN 1263	
Proper Shipping Name:	Consumer commodity	Consumer commodity	Paint	
Hazard Class:	ORM-D	9	3	
Packing Group:	-	-	II	
RQ:	-	-	RQ	
Other - Tech Name:	-	-	(xylenes)	
Other - Marine Pollutant:	-	-	-	
Other:	-	ICAO	ICAO	
STCC:	49-411-05	49-411-05	49-101-53	
HTS:	3210-00-0000	3210-00-0000	3210-00-0000	

Notes:

- (1) For U.S. domestic air, in *not more than 1.0 liter inner packages* under DOT via Fedex or UPS and U.S. land transportation, follow DOT Consumer commodity rules for packages up to 66 lb. gross weight.
- (2) For IATA/ICAO and International air transportation, Packing Instructions 910 apply to inner packages not more than 0.5 liter and 30 kg for gross package weight.
- (3) For shipping paper work completed using this PSN, the letters "ICAO" may be included when shipment prepared in accordance with ICAO per 49CFR 171.11(d)(4)(ii).
- (4) For packages greater than outlined in notes (1) and (2) above, follow this classification. Delete "RQ, (xylene)" reference for packages less than 2,500 lbs.
- (5) Standard Transportation Commodity Code (STCC) applies for rail shipments. 49-411-05 applies when classified as consumer commodity (PSN #1 & PSN #2). 49-101-53 applies when classified as Paint (PSN #3).
- (6) The import/export HTS US (Harmonized Tariff Schedule) subheading 3210.00.0000: Paints (including enamel and lacquers), Other.

Canadian TDG Hazard Class & PIN:	PSN #1 N/A & PSN #2: Consumer commodity, 9, ID 8000; PSN #3: 3, UN 1263
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*** Section 15 - Regulatory Information ***

US Federal Regulations

A: General Product Information

In reference to Title VI of the Clean Air Act of 1990, this material does not contain nor was it manufactured using ozone-depleting chemicals.

B: Component Analysis

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 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Isobutyl acetate (110-19-0)

CERCLA: 5000 lb final RQ (listed under Butyl acetate); 2270 kg final RQ (listed under Butyl acetate)

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Acetone (67-64-1)

CERCLA: 5000 lb final RQ; 2270 kg final RQ

Isopropyl alcohol (67-63-0)

SARA 313: 1.0 % de minimis concentration (only if manufactured by the strong acid process, no supplier notification)

2-Butoxyethanol (111-76-2)

SARA 313: 1.0 % de minimis concentration (applies to R-(OCH₂CH₂)_n-OR', where n = 1,2, or 3, R=alkyl C7 or less, or R = phenyl or alkyl substituted phenyl, R' = H or alkyl C7 or less, or OR' consisting of carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate, Chemical Category N230) (related to Glycol ethers)

n-Butyl alcohol (71-36-3)

SARA 313: 1.0 % de minimis concentration
 CERCLA: 5000 lb final RQ; 2270 kg final RQ

Xylenes (1330-20-7)

SARA 313: 1.0 % de minimis concentration
 CERCLA: 100 lb final RQ; 45.4 kg final RQ

1,2,4-Trimethyl benzene (95-63-6)

SARA 313: 1.0 % de minimis concentration

Ethyl benzene (100-41-4)

SARA 313: 0.1 % de minimis concentration
 CERCLA: 1000 lb final RQ; 454 kg final RQ

SARA 311/312 Physical and Health Hazard Categories:

Immediate (acute) Health Hazard: Yes

Delayed (chronic) Health Hazard: Yes

Fire Hazard: Yes

Sudden Release of Pressure: No

Reactive: No

State Regulations

A: General Product Information

Chemical(s) known to the State of California to cause cancer: Ethyl benzene, Carbon black (airborne, unbound particles of respirable size) is on the California Prop 65 list. The carbon black in the colorant for this material is bound in a polymeric matrix. As supplied, the carbon black in this material does not meet the criteria of the Prop 65 list.

B: Component Analysis - State

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

Component	CAS #	CA	FL	MA	MN	NJ	PA
Isopropyl acetate	108-21-4	Yes	No	Yes	Yes	Yes	Yes
Isobutyl acetate	110-19-0	Yes	No	Yes	Yes	Yes	Yes
Acetone	67-64-1	Yes	No	Yes	Yes	Yes	Yes
Isopropyl alcohol	67-63-0	Yes	No	Yes	Yes	Yes	Yes
2-Butoxyethanol	111-76-2	Yes	No	Yes	Yes	Yes	Yes
Propylene glycol monomethyl ether (PGME)	107-98-2	Yes	No	Yes	Yes	Yes	Yes
n-Butyl alcohol	71-36-3	Yes	No	Yes	Yes	Yes	Yes
Xylenes	1330-20-7	Yes	No	Yes	Yes	Yes	Yes
1,2,4-Trimethyl benzene	95-63-6	No	No	Yes	Yes	Yes	Yes
Isobutyl isobutyrate	97-85-8	No	No	No	No	Yes	No
Ethyl benzene	100-41-4	Yes	No	Yes	Yes	Yes	Yes
Titanium dioxide	13463-67-7	No	No	Yes	Yes	Yes	Yes
Iron oxide	1309-37-1	Yes	No	Yes	Yes	Yes	Yes
Carbon black	1333-86-4	Yes	No	Yes	Yes	Yes	Yes
Talc	14807-96-6	Yes	No	Yes	Yes	Yes	Yes

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The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

Other Regulations

A: General Product Information

Material meets the criteria for inclusion in WHMIS B2, D1A, D2A and D2B.

B: Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Isopropyl acetate	108-21-4	1 %
Isobutyl acetate	110-19-0	1 %
Acetone	67-64-1	1 %
Isopropyl alcohol	67-63-0	1 %
2-Butoxyethanol	111-76-2	1 %
Propylene glycol monomethyl ether (PGME)	107-98-2	1 %
n-Butyl alcohol	71-36-3	1 %
1,2,4-Trimethyl benzene	95-63-6	0.1 %
Ethyl benzene	100-41-4	0.1 %
Iron oxide	1309-37-1	1 %
Carbon black	1333-86-4	1 %

C: Component Analysis - Inventory

Component	CAS #	TSCA	DSL	EINECS	AUST.	MITI
Isopropyl acetate	108-21-4	Yes	Yes	Yes	Yes	Yes
Isobutyl acetate	110-19-0	Yes	Yes	Yes	Yes	Yes
Acetone	67-64-1	Yes	Yes	Yes	Yes	Yes
Isopropyl alcohol	67-63-0	Yes	Yes	Yes	Yes	Yes
Naphtha, light aliphatic	64742-89-8	Yes	Yes	Yes	Yes	No
2-Butoxyethanol	111-76-2	Yes	Yes	Yes	Yes	Yes
Propylene glycol monomethyl ether (PGME)	107-98-2	Yes	Yes	Yes	Yes	Yes
Naphtha, medium aliphatic	64742-88-7	Yes	Yes	Yes	Yes	No
Naphtha, light aromatic	64742-95-6	Yes	Yes	Yes	Yes	No
n-Butyl alcohol	71-36-3	Yes	Yes	Yes	Yes	Yes
Xylenes	1330-20-7	Yes	Yes	Yes	Yes	Yes
Oxo-hexyl acetate	88230-35-7	Yes	Yes	No	Yes	No
1,2,4-Trimethyl benzene	95-63-6	Yes	Yes	Yes	Yes	Yes
Isobutyl isobutyrate	97-85-8	Yes	Yes	Yes	Yes	Yes
Ethyl benzene	100-41-4	Yes	Yes	Yes	Yes	Yes
Titanium dioxide	13463-67-7	Yes	Yes	Yes	Yes	Yes
Iron oxide	1309-37-1	Yes	Yes	Yes	Yes	Yes
Carbon black	1333-86-4	Yes	Yes	Yes	Yes	Yes
Talc	14807-96-6	Yes	Yes	Yes	Yes	No

*** Section 16 - Other Information ***

MSDS History

Original: March 16, 1998

Supersedes: December 18, 2007

Revised: March 2, 2011

MSDS Status

03/02/11: Changes to section 1, manufacturer name, address and phone number.

12/18/07: Changes to section 1, manufacturer name, address and phone number.

07/17/07: Changes to section 1, manufacturer name, address and phone number.

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11/17/06: Reviewed on a periodic basis in accordance with Alcoa policy.

Changes in Sections 1, 2, 3, 5, 6, 7, 8, 9, 11, 12, 13, 14 and 15.

09/22/03: Changes in Sections 1 and 15.

Prepared By

Preparer: Jesse D. Aiken, 937-498-6117

Other Information

* NFPA 30, Flammable and Combustible Liquids Code

* NFPA 321, Standard on Basic Classification of Flammable and Combustible Liquids.

* Guide to Occupational Exposure Values-2006, Compiled by the American Conference of Governmental Industrial Hygienists (ACGIH).

* Documentation of the Threshold Limit Values and Biological Exposure Indices, Sixth Edition, 1991, Compiled by the American Conference of Governmental Industrial Hygienists, Inc. (ACGIH).

* NIOSH Pocket Guide to Chemical Hazards, U.S. Department of Health and Human Services, February 2004.

* Patty's Industrial Hygiene and Toxicology: Volume II: Toxicology, 4th ed., 1994, Patty, F. A.; edited by Clayton, G. D. and Clayton, F. E.: New York: John Wiley & Sons, Inc.

* expub, www.expub.com, Expert Publishing, LLC.

Key-Legend: ACGIH American Conference of Governmental Industrial Hygienists

AICS	Australian Inventory of Chemical Substances
CAS	Chemical Abstract Service
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CPR	Cardio-pulmonary Resuscitation
DOT	Department of Transportation
DSL	Domestic Substances List (Canada)
EC	Effective Concentration
ED	Effective Dose
EINECS	European Inventory of Existing Commercial Chemical Substances
EPA	Environmental Protection Act
IARC	International Agency for Research on Cancer
LC ₅₀	Lethal concentration (50 percent kill)
LC _{Lo}	Lowest published lethal concentration
LD ₅₀	Lethal dose (50 percent kill)
LD _{Lo}	Lowest published lethal dose
LFL	Lower Flammable Limit
MITI	Ministry of International Trade & Industry
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
NORM	Naturally occurring radioactive materials
NTP	National Toxicology Program
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PIN	Product Identification Number
PSN	Proper Shipping Name
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
STEL	Short Term Exposure Limit
TCLP	Toxic Chemicals Leachate Program
TDG	Transportation of Dangerous Goods
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
UFL	Upper Flammable Limit
WHMIS	Workplace Hazardous Materials Information System

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atm	atmosphere
cm	centimeter
g, gm	gram
in	inch
kg	kilogram
lb	pound
m	meter
mg	milligram
ml, ML	milliliter
mm	millimeter
mppcf	million particles per cubic foot
n.o.s.	not otherwise specified
ppb	parts per billion
ppm	parts per million
psia	pounds per square inch absolute
u	micron
ug	microgram

INFORMATION HEREIN IS GIVEN IN GOOD FAITH AS AUTHORITATIVE AND VALID; HOWEVER, NO WARRANTY, EXPRESS OR IMPLIED, CAN BE MADE.

This is the end of MSDS # 1017