

Material Safety Data Sheet



Date of issue 17 July 2014

Version 15

1. Product and company identification

Product name : DELTRON 2000 BASECOAT
Code : DBC-1
Supplier : PPG Industries, Inc.
One PPG Place,
Pittsburgh, PA 15272
Emergency telephone number : (412) 434-4515 (U.S.)
(514) 645-1320 (Canada)
01-800-00-21-400 (Mexico)
Technical Phone Number : (740) 363-9610 (DELAWARE, OH) 8:00 a.m. - 5:00 p.m. EST

2. Hazards identification

Emergency overview : DANGER!
FLAMMABLE LIQUID AND VAPOR. HARMFUL OR FATAL IF SWALLOWED. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. MAY CAUSE ALLERGIC RESPIRATORY REACTION. MAY BE HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. SANDING AND GRINDING DUSTS MAY BE HARMFUL IF INHALED. ASPIRATION HAZARD. CAN ENTER LUNGS AND CAUSE DAMAGE. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE. SUSPECT CANCER HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE CANCER. Add this product only to water. Never add water to this product.

Keep away from flames, such as a pilot light, and any object that sparks, such as an electric motor. Keep away from heat. Do not smoke. Do not breathe vapor or mist. Do not swallow. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Potential acute health effects

Inhalation : May be harmful if inhaled. Irritating to respiratory system. Can irritate eyes, nose, mouth and throat. May cause sensitization by inhalation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Ingestion : Harmful or fatal if swallowed. Aspiration hazard if swallowed. Can enter lungs and cause damage.

Skin : Harmful in contact with skin. Irritating to skin.

Eyes : Severely irritating to eyes. Risk of serious damage to eyes.

Over-exposure signs/symptoms

Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. **1-component mixtures:** formaldehyde is released during curing. Formaldehyde may cause irreversible effects, is irritating to the mucous membranes and may cause skin sensitization.

Medical conditions aggravated by over-exposure : Pre-existing respiratory disorders and disorders involving any other target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

2. Hazards identification

This Material Safety Data Sheet has been prepared in accordance with Canada's Workplace Hazardous Materials Information System (WHMIS) and the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See toxicological information (Section 11)

3. Composition/information on ingredients

Name	CAS number	%
n-butyl acetate	123-86-4	60 - 100
titanium dioxide	13463-67-7	60 - 100
2-methoxy-1-methylethyl acetate	108-65-6	15 - 40
xylene	1330-20-7	15 - 40
diiron trioxide	1309-37-1	15 - 40
Mica-group minerals	12001-26-2	10 - 30
butanone	78-93-3	10 - 30
4-methylpentan-2-one	108-10-1	10 - 30
butan-1-ol	71-36-3	10 - 30
aluminium oxide	1344-28-1	10 - 30
glass, oxide, chemicals	65997-17-3	10 - 30
Amorphous Silicate	Not available.	10 - 30
heptan-2-one	110-43-0	10 - 30
toluene	108-88-3	7 - 13
Aluminium powder (stabilized)	7429-90-5	7 - 13
zirconium dioxide	1314-23-4	7 - 13
Solvent naphtha (petroleum), light aromatic	64742-95-6	5 - 10
Naphtha (petroleum), heavy alkylate	64741-65-7	5 - 10
29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32 copper	147-14-8	3 - 7
Naphtha (petroleum), hydrotreated heavy	64742-48-9	3 - 7
Ligroine	8032-32-4	3 - 7
silicon dioxide	7631-86-9	3 - 7
ethylbenzene	100-41-4	3 - 7
Silica gel, pptd., cryst.-free	112926-00-8	3 - 7
Natural graphite	7782-42-5	3 - 7
polychloro copper phthalocyanine	1328-53-6	3 - 7
[1-[(2-hydroxyphenyl)imino]methyl]-2-naphtholato(2-)-N,O,O']copper	15680-42-9	1 - 5
Copper, [29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32]-, brominated chlorinated	68512-13-0	1 - 5
carbon black, respirable powder	1333-86-4	1 - 5
2-ethoxy-1-methylethyl acetate	54839-24-6	1 - 5
Stoddard solvent	8052-41-3	1 - 5
tin dioxide	18282-10-5	1 - 5
Silica, amorphous, fumed, cryst.-free	112945-52-5	1 - 5
barium sulfate	7727-43-7	1 - 5
Solvent naphtha (petroleum), light aliph.	64742-89-8	1 - 5
aluminium hydroxide	21645-51-2	1 - 5
2-methylpropan-1-ol	78-83-1	1 - 5
chromium (III) oxide	1308-38-9	1 - 5
1,2,4-trimethylbenzene	95-63-6	1 - 5
ammonium iron(3+) hexakis(cyano-C)ferrate(4-)	25869-00-5	1 - 5
2-butoxyethyl acetate	112-07-2	0.5 - 1.5
Resin acids and Rosin acids, calcium salts	9007-13-0	0.5 - 1.5
quino[2,3-b]acridine-6,7,13,14(5H,12H)-tetrone	1503-48-6	0.5 - 1.5
Zinc Salt	Not available.	0.5 - 1.5
calcium molybdate	7789-82-4	0.5 - 1.5
acrylic acid, monoester with propane-1,2-diol	25584-83-2	0.1 - 1
Benzyl butyl phthalate	85-68-7	0.1 - 1
styrene	100-42-5	0.1 - 1
methyl methacrylate	80-62-6	0.1 - 1
2-ethylhexyl acrylate	103-11-7	0.1 - 1
2-methoxypropyl acetate	70657-70-4	0.1 - 1

3 . Composition/information on ingredients

rosin	8050-09-7	0.1 - 1
mesitylene	108-67-8	0.1 - 1

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4 . First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Material Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.
- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

5 . Fire-fighting measures

Flammability of the product : Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Extinguishing media

Suitable : Use dry chemical, CO₂, water spray (fog) or foam.

Not suitable : Do not use water jet.

Special exposure hazards : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Hazardous combustion products : Decomposition products may include the following materials:
carbon oxides
nitrogen oxides
sulfur oxides
halogenated compounds
metal oxide/oxides
Formaldehyde.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6 . Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Use spark-proof tools and explosion-proof equipment. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7 . Handling and storage

- Handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Persons with a history of asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not breathe vapor or mist. Do not swallow. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. Vapors are heavier than air and may spread along floors. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Add this product only to water. Never add water to this product. Empty containers retain product residue and can be hazardous. Do not reuse container. If this material is part of a multiple component system, read the Material Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.
- Storage** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Do not store above the following temperature: 120F / 49C.

8 . Exposure controls/personal protection

Name	Result	ACGIH	OSHA	Ontario	Mexico	PPG
n-butyl acetate	TWA STEL	150 ppm 200 ppm	150 ppm Not established	150 ppm 200 ppm	150 ppm 200 ppm	Not established Not established
titanium dioxide	TWA STEL	10 mg/m ³ Not established	15 mg/m ³ TD Not established	10 mg/m ³ TD Not established	10 mg/m ³ (as Ti) 20 mg/m ³ (as Ti)	Not established Not established
2-methoxy-1-methylethyl acetate	TWA	Not established	Not established	50 ppm	Not established	50 ppm
xylene	TWA STEL	100 ppm 150 ppm	100 ppm Not established	100 ppm 150 ppm	100 ppm 150 ppm	Not established Not established
diiron trioxide	TWA STEL	5 mg/m ³ R Not established	10 mg/m ³ Not established	5 mg/m ³ R Not established	5 mg/m ³ (as Fe) 10 mg/m ³ (as Fe)	Not established Not established
Mica-group minerals	TWA	3 mg/m ³ R	20 mppcf Z	3 mg/m ³ R	3 mg/m ³	Not established
butanone	TWA STEL	200 ppm 300 ppm	200 ppm Not established	200 ppm 300 ppm	200 ppm 300 ppm	Not established Not established
4-methylpentan-2-one	TWA STEL	20 ppm 75 ppm	100 ppm Not established	50 ppm 75 ppm	50 ppm 75 ppm	Not established Not established
butan-1-ol	TWA STEL	20 ppm Not established	100 ppm Not established	20 ppm Not established	Not established 50 ppm S C	Not established Not established
aluminium oxide	TWA	3 mg/m ³ R 10 mg/m ³ 1 mg/m ³ R	15 mg/m ³ TD 5 mg/m ³ R	10 mg/m ³ 10 mg/m ³ TD 10 mg/m ³ R 1 mg/m ³ R	10 mg/m ³	Not established
glass, oxide, chemicals	TWA	10 MG/M3 TD 3 MG/M3 R 1 f/cc 5 mg/m ³ (Inhalable) 1 f/cc R 5 mg/m ³	15 mg/m ³ TD 5 mg/m ³ R 15 mg/m ³	1 f/cc R 5 mg/m ³ 10 mg/m ³	Not established	Not established

8 . Exposure controls/personal protection

Amorphous Silicate	TWA	10 MG/M3 R	Not established	Not established	Not established	Not established
heptan-2-one	TWA	50 ppm	100 ppm	25 ppm	50 ppm	Not established
	STEL	Not established	Not established	Not established	100 ppm	Not established
toluene	TWA	20 ppm	200 ppm Z	20 ppm	50 ppm S	Not established
	STEL	Not established	500 ppm Z A 300 ppm Z C	Not established	Not established	Not established
Aluminium powder (stabilized)	TWA	1 mg/m ³ R	15 mg/m ³ (as Al) TD 5 mg/m ³ (as Al) R	1 mg/m ³ R	5 mg/m ³ 5 mg/m ³	Not established
zirconium dioxide	TWA	5 mg/m ³ (as Zr)	5 mg/m ³ (as Zr) 5 mg/m ³ (as Zr)	5 mg/m ³ (as Zr)	5 mg/m ³ (as Zr)	Not established
	STEL	10 mg/m ³ (as Zr)	10 mg/m ³ (as Zr)	10 mg/m ³ (as Zr)	10 mg/m ³ (as Zr)	Not established
Ligroine	TWA	Not established	Not established	Not established	300 ppm	Not established
	STEL	Not established	Not established	Not established	400 ppm	Not established
silicon dioxide	TWA	Not established	Not established	Not established	10 mg/m ³ 3 mg/m ³ R	Not established
	TWA	20 ppm	100 ppm	20 ppm	100 ppm	Not established
ethylbenzene	TWA	20 ppm	100 ppm	20 ppm	100 ppm	Not established
	STEL	Not established	Not established	Not established	125 ppm	Not established
Silica gel, pptd., cryst.-free	TWA	Not established	Not established	10 mg/m ³	10 mg/m ³	Not established
Natural graphite	TWA	2 mg/m ³ R	15 mppcf Z 5 mg/m ³ R 10 mg/m ³	2 mg/m ³ R	2 mg/m ³	Not established
	TWA	3 mg/m ³	3.5 mg/m ³	3 mg/m ³	3.5 mg/m ³	Not established
carbon black, respirable powder	TWA	3 mg/m ³	3.5 mg/m ³	3 mg/m ³	3.5 mg/m ³	Not established
	STEL	Not established	Not established	Not established	7 mg/m ³	Not established
Stoddard solvent	TWA	100 ppm	500 ppm	100 ppm	100 ppm	Not established
	STEL	Not established	Not established	Not established	200 ppm	Not established

8 . Exposure controls/personal protection

tin dioxide	TWA	2 mg/m ³ (as Sn)	2 mg/m ³ TD	2 mg/m ³ (as Sn)	2 mg/m ³ (as Sn)	Not established
	STEL	Not established	2 mg/m ³ Not established	Not established	4 mg/m ³ (as Sn)	Not established
Silica, amorphous, fumed, cryst.-free	TWA	Not established	Not established	Not established	10 mg/m ³ 3 mg/m ³ R	Not established
	TWA	10 mg/m ³	15 mg/m ³ TD 5 mg/m ³ R	10 mg/m ³ TD	Not established	Not established
aluminium hydroxide	TWA	1 mg/m ³ 1 mg/m ³ R	Not established	1 mg/m ³ R	Not established	Not established
	TWA	50 ppm	100 ppm	50 ppm	50 ppm	Not established
2-methylpropan-1-ol	STEL	Not established	Not established	Not established	75 ppm	Not established
	TWA	0.5 mg/m ³ (measured as Cr) 0.1 MG/M ³ () TD	0.5 mg/m ³ 0.5 mg/m ³ (as Cr)	0.5 mg/m ³ (as Cr)	0.5 mg/m ³ ()	Not established
chromium (III) oxide	TWA	25 ppm	Not established	25 ppm	25 ppm	Not established
	STEL	Not established	Not established	Not established	35 ppm	Not established
1,2,4-trimethylbenzene	TWA	1 mg/m ³ (as Fe)	5 mg/m ³ (as CN) S	1 mg/m ³ (as Fe)	1 mg/m ³ (as Fe) 5 mg/m ³ (as Cn)	Not established
	STEL	5 mg/m ³ S C	Not established	Not established	2 mg/m ³ (as Fe)	Not established
ammonium iron(3+) hexakis (cyano-C)ferrate(4-)	TWA	20 ppm	Not established	20 ppm	Not established	Not established
	STEL	Not established	Not established	Not established	Not established	Not established
2-butoxyethyl acetate	TWA	10 MG/M ³ TD 3 MG/M ³ R	10 mg/m ³ 15 mg/m ³ (as Mo) TD	3 mg/m ³ (as Mo) R 10 mg/m ³ (as Mo)	10 mg/m ³ (as Mo)	Not established
	STEL	10 mg/m ³ (as Mo) 3 mg/m ³ (as Mo) R Not established	Not established	Not established	20 mg/m ³ (as Mo)	Not established
calcium molybdate	TWA	20 ppm S	100 ppm Z	35 ppm	50 ppm S	Not established
	STEL	40 ppm S	600 ppm Z A	100 ppm	100 ppm S	Not established
styrene	TWA	Not established	Not established	Not established	Not established	Not established
	STEL	Not established	Not established	Not established	Not established	Not established

8 . Exposure controls/personal protection

			200 ppm Z C			
methyl methacrylate	TWA	50 ppm SS	100 ppm	50 ppm SS	100 ppm	Not established
	STEL	100 ppm SS	Not established	100 ppm SS	125 ppm	Not established
mesitylene	TWA	25 ppm	Not established	25 ppm	25 ppm	Not established
	STEL	Not established	Not established	Not established	35 ppm	Not established

Key to abbreviations

A	= Acceptable Maximum Peak	S	= Potential skin absorption
ACGIH	= American Conference of Governmental Industrial Hygienists.	SR	= Respiratory sensitization
C	= Ceiling Limit	SS	= Skin sensitization
F	= Fume	STEL	= Short term Exposure limit values
IPEL	= Internal Permissible Exposure Limit	TD	= Total dust
OSHA	= Occupational Safety and Health Administration.	TLV	= Threshold Limit Value
R	= Respirable	TWA	= Time Weighted Average
Z	= OSHA 29CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances		

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Engineering measures : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Eyes : Chemical splash goggles.

Hands : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Respiratory : By spraying: air-fed respirator. By other operations than spraying, in well ventilated areas, air-fed respirators could be replaced by a combination charcoal filter and particulate filter mask. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Skin : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

8 . Exposure controls/personal protection

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9 . Physical and chemical properties

Physical state : Liquid.
Flash point : Closed cup: -1.11°C (30°F)
Material supports combustion. : Yes.
Color : Not available.
Odor : Not available.
pH : Not available.
Boiling/condensation point : >37.78°C (>100°F)
Melting/freezing point : Not available.
Specific gravity : 0.99
Density (lbs / gal) : 8.26
Vapor pressure : Not available.
Vapor density : Not available.
Volatility : 80% (v/v), 71% (w/w)
Evaporation rate : Not available.
Partition coefficient: n-octanol/water : Not available.
% Solid. (w/w) : 28.59

Physical property values shown in this section are calculated averages. For specific product information, contact your PPG Sales Representative.

10 . Stability and reactivity

Stability : The product may not be stable under certain conditions of storage or use.
Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Avoid increased storage temperature. Pressure hazard
Materials to avoid : Reactive or incompatible with the following materials:,water,acids,oxidizing materials, strong alkalis
Hazardous decomposition products : Formaldehyde.
Hazardous polymerization : Under normal conditions of storage and use, hazardous polymerization will not occur.

11 . Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
n-butyl acetate	LD50 Oral	Rat	10.768 g/kg	-
	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LC50 Inhalation	Rat	>21.1 mg/l	4 hours
titanium dioxide	LD50 Oral	Rat	>10 g/kg	-
	LD50 Dermal	Rabbit	8532 mg/kg	-
2-methoxy-1-methylethyl acetate	LD50 Oral	Rat	>5 g/kg	-
	LD50 Dermal	Rabbit	>5 g/kg	-
xylene	LD50 Oral	Rat	4.3 g/kg	-
	LD50 Dermal	Rabbit	>1.7 g/kg	-
	LC50 Inhalation	Rat	5000 ppm	4 hours

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diiron trioxide	Vapor			
butanone	LD50 Oral	Rat	10 g/kg	-
	LD50 Oral	Rat	2737 mg/kg	-
	LD50 Dermal	Rabbit	6480 mg/kg	-
	LC50 Inhalation	Rat	11243 ppm	4 hours
4-methylpentan-2-one	Vapor			
	LD50 Oral	Rat	2.08 g/kg	-
	LC50 Inhalation	Rat	32772 mg/m3	4 hours
butan-1-ol	Vapor			
	LD50 Oral	Rat	0.79 g/kg	-
	LD50 Dermal	Rabbit	3400 mg/kg	-
	LC50 Inhalation	Rat	8000 ppm	4 hours
heptan-2-one	Vapor			
	LD50 Oral	Rat	1.6 g/kg	-
	LD50 Dermal	Rabbit	10.206 g/kg	-
toluene	LD50 Oral	Rat	636 mg/kg	-
	LD50 Dermal	Rabbit	8.39 g/kg	-
	LC50 Inhalation	Rat	49 g/m3	4 hours
Solvent naphtha (petroleum), light aromatic	LD50 Oral	Rat	8400 mg/kg	-
	LD50 Dermal	Rabbit	3.48 g/kg	-
29H,31H-phthalocyaninato(2-)-N29,N30, N31,N32 copper	LD50 Oral	Rat	5.1 g/kg	-
Naphtha (petroleum), hydrotreated heavy	LD50 Oral	Rat	>6 g/kg	-
	LC50 Inhalation	Rat	8500 mg/m3	4 hours
Ligroine	LC50 Inhalation	Rat	3400 ppm	4 hours
ethylbenzene	LD50 Oral	Rat	3.5 g/kg	-
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LC50 Inhalation	Rat	4000 ppm	4 hours
	Vapor			
polychloro copper phthalocyanine	LD50 Oral	Rat	>5000 mg/kg	-
Copper, [29H,31H-phthalocyaninato(2-)- N29,N30,N31,N32]-, brominated chlorinated	LD50 Oral	Rat	>5 g/kg	-
carbon black, respirable powder	LD50 Oral	Rat	>15400 mg/kg	-
	LD50 Dermal	Rabbit	>3 g/kg	-
2-ethoxy-1-methylethyl acetate	LD50 Oral	Rat	4.705 g/kg	-
	LC50 Inhalation	Rat	6990 mg/m3	4 hours
	Vapor			
Stoddard solvent	LD50 Oral	Rat	>5 g/kg	-
tin dioxide	LD50 Oral	Rat	>20 g/kg	-
Silica, amorphous, fumed, cryst.-free	LD50 Oral	Rat	3160 mg/kg	-
2-methylpropan-1-ol	LD50 Oral	Rat	2460 mg/kg	-
	LD50 Dermal	Rabbit	2 g/kg	-
	LC50 Inhalation	Rat	6500 mg/m3	4 hours
	Vapor			
1,2,4-trimethylbenzene	LD50 Oral	Rat	5 g/kg	-
	LC50 Inhalation	Rat	18000 mg/m3	4 hours
2-butoxyethyl acetate	LD50 Oral	Rat	1.6 g/kg	-
	LD50 Dermal	Rabbit	1.48 g/kg	-
Zinc Salt	LD50 Oral	Rat	>0.552 g/kg	-
calcium molybdate	LD50 Oral	Rat	0.101 g/kg	-
acrylic acid, monoester with propane-1, 2-diol	LD50 Dermal	Rabbit	0.17 g/kg	-
Benzyl butyl phthalate	LD50 Oral	Rat	2.33 g/kg	-
	LD50 Dermal	Rabbit	>10 g/kg	-
	LC50 Inhalation	Rat	>6700 mg/m3	4 hours
	Vapor			
styrene	LD50 Oral	Rat	1 g/kg	-

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methyl methacrylate	LC50 Inhalation Vapor	Rat	2700 ppm	4 hours
	LD50 Oral	Rat	7872 mg/kg	-
	LD50 Dermal	Rabbit	>5 g/kg	-
2-ethylhexyl acrylate	LC50 Inhalation Vapor	Rat	78000 mg/m3	4 hours
	LD50 Oral	Rat	5.7 g/kg	-
	LD50 Dermal	Rabbit	8.5 g/kg	-
2-methoxypropyl acetate	LD50 Oral	Rat	8532 mg/kg	-
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LC50 Inhalation	Rat	>5320 ppm	4 hours
rosin	LD50 Oral	Rat	7600 mg/kg	-
mesitylene	LD50 Oral	Rat	5000 mg/kg	-
	LC50 Inhalation	Rat	24000 mg/m3	4 hours

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

Defatting irritant

: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Target organs

: Contains material which causes damage to the following organs: brain, central nervous system (CNS), eye, lens or cornea.
Contains material which may cause damage to the following organs: blood, kidneys, lungs, the nervous system, the reproductive system, liver, mucous membranes, heart, spleen, lymphatic system, peripheral nervous system, gastrointestinal tract, cardiovascular system, upper respiratory tract, skin, bone marrow, ears, testes, thyroid.

Carcinogenicity**Carcinogenicity**

: Contains material which may cause cancer. Risk of cancer depends on duration and level of exposure.

Classification

Product/ingredient name	ACGIH	IARC	NTP	OSHA
titanium dioxide	A4	2B	-	-
xylene	A4	3	-	-
diiiron trioxide	A4	3	-	-
4-methylpentan-2-one	A3	2B	-	-
aluminium oxide	A4	-	-	-
glass, oxide, chemicals	A4	3	-	-
toluene	A4	3	-	-
Aluminium powder (stabilized)	A4	-	-	-
zirconium dioxide	A4	-	-	-
silicon dioxide	-	3	-	-
ethylbenzene	A3	2B	-	-
Silica gel, pptd., cryst.-free	-	3	-	-
carbon black, respirable powder	A3	2B	-	-
Silica, amorphous, fumed, cryst.-free	-	3	-	-
aluminium hydroxide	A4	-	-	-
chromium (III) oxide	A4	3	-	-
2-butoxyethyl acetate	A3	-	-	-
Benzyl butyl phthalate	-	3	-	-
styrene	A4	2B	Reasonably anticipated to be a human carcinogen.	-
methyl methacrylate	A4	3	-	-
2-ethylhexyl acrylate	-	3	-	-

11 . Toxicological information

Carcinogen Classification code: ACGIH: A1, A2, A3, A4, A5
IARC: 1, 2A, 2B, 3, 4
NTP: Proven, Possible
OSHA: +
Not listed or regulated as a carcinogen: -

Teratogenicity

Teratogenicity : Contains material which may cause birth defects, based on animal data.

Developmental effects : Contains material which may cause developmental abnormalities, based on animal data.

Fertility effects : Contains material which may impair male fertility, based on animal data. Contains material which may impair female fertility, based on animal data.

12 . Ecological information

Environmental effects : No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
Titanium dioxide	Acute EC50 100 mg/L Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
ethylbenzene	Acute LC50 150 to 200 mg/L Fresh water	Fish - Bluegill - Lepomis macrochirus	96 hours

13 . Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14. Transport information

	DOT	TDG	Mexico	IMDG
UN number	1263	1263	1263	1263
UN proper shipping name	PAINT	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3	3
Packing group	II	II	II	II

14. Transport information

Environmental hazards	No.	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	Not applicable.
Product RQ (lbs)	298.21	Not applicable.	Not applicable.	Not applicable.
RQ substances	(xylene, n-butyl acetate)	Not applicable.	Not applicable.	Not applicable.

Additional information

- DOT** : Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.
- TDG** : None identified.
- Mexico** : None identified.
- IMDG** : None identified.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

15. Regulatory information

- United States inventory (TSCA 8b)** : All components are listed or exempted.
- Australia inventory (AICS)** : At least one component is not listed.
- Canada inventory (DSL)** : At least one component is not listed. Unlisted component(s) have been notified and volumes are being tracked.
- China inventory (IECSC)** : At least one component is not listed.
- Europe inventory (REACH)** : Please contact your supplier for information on the inventory status of this material.
- Japan inventory (ENCS)** : At least one component is not listed.
- Korea inventory (KECI)** : At least one component is not listed.
- New Zealand (NZIoC)** : Not determined.
- Philippines inventory (PICCS)** : At least one component is not listed.

United States

United States - TSCA 5(a)2 - Final significant new use rules:

2-ethoxyethyl acetate

Listed

2-ethoxyethanol

Listed

SARA 302/304: No products were found.

ERCLA: Hazardous substances.: copper chlorophthalocyanine: No RQ is being assigned to the generic or broad class.; methyl methacrylate: 1000 lbs. (454 kg); styrene: 1000 lbs. (454 kg); Benzyl butyl phthalate: 100 lbs. (45.4 kg); 2-butoxyethanol: No RQ is being assigned to the generic or broad class.; Naphthenic acids: 100 lbs. (45.4 kg); Copper, [29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32]-, chlorinated: No RQ is being assigned to the generic or broad class.; 2-butoxyethyl acetate: No RQ is being assigned to the generic or broad class.; ammonium iron(3+) hexakis(cyano-C) ferrate(4-): No RQ is being assigned to the generic or broad class.; chromium (III) oxide: No RQ is being assigned to the generic or broad class.; 2-methylpropan-1-ol: 5000 lbs. (2270 kg); Copper, [29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32]-, brominated chlorinated: No RQ is being assigned to the generic or broad class.; [1-[(2-hydroxyphenyl)imino]methyl]-2-naphtholato(2-)-N,O]copper: No RQ is being assigned to the generic or broad class.; polychloro copper phthalocyanine: No RQ is being assigned to the generic or broad class.; ethylbenzene: 1000 lbs. (454 kg); 29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32 copper: No RQ is being assigned to the generic or broad class.; toluene: 1000 lbs. (454 kg); glass, oxide, chemicals: No RQ is being assigned to the generic or broad class.; butan-1-ol: 5000 lbs. (2270 kg); 4-methylpentan-2-one: 5000 lbs. (2270 kg); butanone: 5000 lbs. (2270 kg); xylene: 100 lbs. (45.4 kg); n-butyl acetate: 5000 lbs. (2270 kg);

15. Regulatory information

SARA 311/312 SDS Distribution - Chemical Inventory - Hazard Identification:

<u>Chemical name</u>	<u>CAS #</u>	<u>Acute</u>	<u>Chronic</u>	<u>Fire</u>	<u>Reactive</u>	<u>Pressure</u>
n-butyl acetate	123-86-4	Y	N	Y	N	N
titanium dioxide	13463-67-7	N	Y	N	N	N
2-methoxy-1-methylethyl acetate	108-65-6	Y	N	Y	N	N
xylene	1330-20-7	Y	N	Y	N	N
diiron trioxide	1309-37-1	N	N	N	N	N
Mica-group minerals	12001-26-2	N	N	N	N	N
butanone	78-93-3	Y	N	Y	N	N
4-methylpentan-2-one	108-10-1	Y	Y	Y	N	N
butan-1-ol	71-36-3	Y	N	Y	N	N
aluminium oxide	1344-28-1	N	N	N	N	N
glass, oxide, chemicals	65997-17-3	N	N	N	N	N
Amorphous Silicate	Not available.	N	N	N	N	N
heptan-2-one	110-43-0	Y	N	Y	N	N
toluene	108-88-3	Y	Y	Y	N	N
Aluminium powder (stabilized)	7429-90-5	N	N	N	Y	N
zirconium dioxide	1314-23-4	N	N	N	N	N
Solvent naphtha (petroleum), light aromatic	64742-95-6	Y	N	Y	N	N
Naphtha (petroleum), heavy alkylate	64741-65-7	Y	N	Y	N	N
Naphtha (petroleum), hydrotreated heavy	64742-48-9	Y	N	Y	N	N
Ligroine	8032-32-4	Y	N	Y	N	N
silicon dioxide	7631-86-9	N	N	N	N	N
ethylbenzene	100-41-4	Y	Y	Y	N	N
Silica gel, pptd., cryst.-free	112926-00-8	N	N	N	N	N
Natural graphite	7782-42-5	N	N	N	N	N
carbon black, respirable powder	1333-86-4	N	Y	N	N	N
2-ethoxy-1-methylethyl acetate	54839-24-6	Y	N	Y	N	N
Stoddard solvent	8052-41-3	Y	N	Y	N	N
tin dioxide	18282-10-5	N	N	N	N	N
Silica, amorphous, fumed, cryst.-free	112945-52-5	N	N	N	N	N
barium sulfate	7727-43-7	N	N	N	N	N
Solvent naphtha (petroleum), light aliph.	64742-89-8	Y	N	N	N	N
aluminium hydroxide	21645-51-2	N	N	N	N	N
2-methylpropan-1-ol	78-83-1	Y	N	Y	N	N
chromium (III) oxide	1308-38-9	N	N	N	N	N
1,2,4-trimethylbenzene	95-63-6	Y	N	Y	N	N
ammonium iron(3+) hexakis(cyano-C)ferrate(4-)	25869-00-5	N	N	N	Y	N
2-butoxyethyl acetate	112-07-2	Y	Y	Y	N	N
quino[2,3-b]acridine-6,7,13,14(5H,12H)-tetrone	1503-48-6	Y	N	N	N	N
Resin acids and Rosin acids, calcium salts	9007-13-0	Y	N	N	N	N
calcium molybdate	7789-82-4	Y	N	N	N	N
acrylic acid, monoester with propane-1,2-diol	25584-83-2	Y	Y	N	Y	N
Benzyl butyl phthalate	85-68-7	Y	Y	N	N	N
styrene	100-42-5	Y	Y	Y	Y	N
methyl methacrylate	80-62-6	Y	Y	Y	Y	N
2-ethylhexyl acrylate	103-11-7	Y	Y	Y	Y	N
2-methoxypropyl acetate	70657-70-4	Y	Y	Y	N	N
		Y	N	N	N	N

15 . Regulatory information

rosin

8050-09-7

Product as-supplied : Y Y Y Y N

<u>SARA 313</u> Supplier notification	<u>Chemical name</u>	<u>CAS number</u>	<u>Concentration</u>
	xylene	1330-20-7	15 - 40
	bismuth vanadium tetraoxide	14059-33-7	15 - 40
	4-methylpentan-2-one	108-10-1	10 - 30
	butan-1-ol	71-36-3	10 - 30
	toluene	108-88-3	7 - 13
	Aluminium powder (stabilized)	7429-90-5	7 - 13
	ethylbenzene	100-41-4	3 - 7
	[1-[(2-hydroxyphenyl)imino]methyl]-2-naphtholato (2-)-N,O,O']copper	15680-42-9	1 - 5
	Copper, [29H,31H-phthalocyaninato(2-)-N29,N30, N31,N32]-, brominated chlorinated	68512-13-0	1 - 5
	chromium (III) oxide	1308-38-9	1 - 5
	1,2,4-trimethylbenzene	95-63-6	1 - 5
	2-butoxyethyl acetate	112-07-2	0.5 - 1.5
	styrene	100-42-5	0.1 - 1

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Canada

WHMIS (Canada) : Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). Class D-1B: Material causing immediate and serious toxic effects (Toxic). Class D-2A: Material causing other toxic effects (Very toxic). Class D-2B: Material causing other toxic effects (Toxic).

MexicoClassification

Flammability : 3 **Health** : 3 **Reactivity** : 1

16 . Other informationHazardous Material Information System (U.S.A.)

Health : 3 * **Flammability** : 3 **Physical hazards** : 1

(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health : 3 **Flammability** : 3 **Instability** : 1

Date of previous issue : 5/8/2014.

Organization that prepared the MSDS : EHS

✓ Indicates information that has changed from previously issued version.

16 . Other information

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.