

# SAFETY DATA SHEET



<b>DATE ISSUED :</b>	6/27/2016
<b>SDS REF. No :</b>	4300 SERIES

## 4300 SERIES SHORT OIL ALKYD

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** 4300 SERIES SHORT OIL ALKYD

**PRODUCT CODE:** 4300 SERIES

**PRODUCT USE:** Industrial Solventborne Paint

**MANUFACTURER**

Cardinal Industrial Finishes  
1329 Potrero Ave

S. El Monte, CA,  
626 444-9274

**24 HR. EMERGENCY TELEPHONE NUMBER**

**CHEMTREC (US Transportation):** (800)424-9300

**CHEMTREC (International :** 1(202)483-7616

**Transportation)**

**WEB:** WWW.CARDINALPAINT.COM

### 2. HAZARDS IDENTIFICATION

**PICTOGRAMS**



**SIGNAL WORD :** DANGER

**HAZARD STATEMENTS :**

H226 Flammable liquid and vapor.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

**PRECAUTIONARY STATEMENTS :**

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P264 Wash thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P337 + P313 If eye irritation persists: Get medical advice/attention.

P403 Store in a well-ventilated place.

P501 Dispose of in accordance with Local, Regional, State, Federal, and International Regulations.

R40 Limited evidence of a carcinogenic effect.

S36 Wear suitable protective clothing.

S37 Wear suitable gloves.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Weight %	CAS Number	
Acetic Acid, n-propyl ester	15% - 20%	109-60-4	
Methyl Amyl Ketone	5% - 10%	110-43-0	

Propyl Alcohol	5% - 10%	71-23-8	
n-Butyl Acetate	5% - 10%	123-86-4	
Amorphous Silica	1% - 5%	7631-86-9	
Xylene	1% - 5%	1330-20-7	
Phenylethane	0.50% - 0.99%	100-41-4	

The follow substances may be present in varying quantities depending on color.

Titanium Dioxide	0% - 60%	13463-67-7	
Carbon Black	0% - 40%	1333-86-4	

#### 4. FIRST AID MEASURES

##### Description of first aid measures.

**EYES CONTACT :** Flush with large quantities of water for 15 to 30 minutes. Remove contact lenses. Keep eyes wide open while rising. If eye irritation persists: Get medical attention.

**SKIN CONTACT :** Wash exposed area with mild soap and water for 15 to 30 minutes. Remove contaminated clothing. Repeated exposure may cause dryness or cracking.

**INGESTION :** Rinse mouth. Do NOT induce vomiting. Keep victim warm and seek immediate attention.

**INHALATION :** Remove to fresh air and keep in a position comfortable to breath. Call a doctor/physician if you feel unwell. Get medical attention.

##### Most important symptoms and effects, both acute and delayed. Symptoms/injuries: Eye irritation

Symptoms/injuries after inhalation: May cause drowsiness or dizziness.

Symptoms/injuries after eye contact: Cause serious eye irritation.

Symptoms/injuries after ingestion: Ingestion may cause nausea, vomiting and diarrhea.

Indication of any immediate medical attention and special treatment needed.

If medical advise is needed, have product container or label on hand.

#### 5. FIRE FIGHTING MEASURES

**SUITABLE EXTINGUISHING MEDIA :** In the event of a fire, use specifically suitable extinguishing agents. Suitable extinguishing media: Foam, alcohol resistant foam, CO<sub>2</sub>, water fog. Unsuitable extinguishing media: Do not use heavy water stream. A heavy water stream may spread burning liquid.

**FIRE FIGHTING PROCEDURE :** Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering the environment.

Protection during firefighting: Firefighters should wear full protective gear. Do not enter fire area without proper protective equipment, including self-contained breathing apparatus with full face piece operated in pressure demand or other positive pressure modes.

**UNUSUAL FIRE AND EXPLOSION HAZARD :** Fire hazard: Highly flammable/liquid or vapor.

Explosive hazard: May form flammable/explosive vapor-air mixture.

#### 6. ACCIDENTAL RELEASE MEASURES

##### PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES :

General measures: Remove ignition sources. Use special care to avoid static electric charges. No smoking.

##### FOR NON-EMERGENCY PERSONNEL :

For non-Emergency procedures: Evacuate unnecessary personnel.

##### FOR EMERGENCY RESPONDERS :

Equip cleanup crew with proper protection. Avoid breathing fume, vapors.

**ENVIRONMENTAL PRECAUTIONS :**

Prevent entry to sewers and public waters.

**METHODS AND MATERIAL FOR CONTAINMENT AND CLEAN UP :**

Collect damaged aerosols and use absorbent and/or inert material, then place in suitable container.

**7. HANDLING AND STORAGE**

**PRECAUTIONS FOR SAFE HANDLING :** Additional hazards when processed: Handle empty containers with care because residual vapors are flammable.

Precautions for safe handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when you are leaving work. Provide good ventilation in process area to prevent formation of vapor. No smoking. Use only non-sparking tools. Use outdoors or in a well ventilated area. Avoid breathing fume, vapors.

Hygiene measures: Wash Skin thoroughly after handling.

**CONDITIONS FOR SAFE STORAGE, INCLUDING INCOMPATIBILITIES :** Storage conditions: Store in a dry, cool and well-ventilated place away from: Heat sources. Direct sunlight.

Incompatible products: Strong bases. Strong acids.

Incompatible materials: Source of ignition. Direct sunlight. Heat Sources.

**8. EXPOSURE CONTROLS\PERSONAL PROTECTION**

2-Ethylhexanoic acid(149-57-5)		
USA ACGIH	ACGI(TLV) RWA	5 mg/m <sup>3</sup> ,
ACETIC ACID, n-propyl ester(109-60-4)		
USA ACGIH	ACGIH (TLV) STEL	250 ppm
USA ACGIH	ACGIH (TLV) TWA	200 ppm
USA NIOSH	NIOSH (REL) ST	250 ppm, 1,050 mg/m <sup>3</sup>
USA NIOSH	NIOSH (REL) TWA	200 ppm, 840 mg/m <sup>3</sup>
USA OSHA	OSHA (OEL) TWA Table Z-1	200 ppm, 840 mg/m <sup>3</sup>
Aliphatic Solvent(64742-47-8)		
USA ACGIH	ACGIH (TLV) TWA	200 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (ST)	10 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA)	5 mg/m <sup>3</sup>
USA OSHA	OSHA OEL (TLV) TWA Table Z-1	500 ppm, 2,000 mg/m <sup>3</sup>
USA OSHA	OSHA OEL Table Z-1	5 mg/m <sup>3</sup>
Aluminum Hydroxide(21645-51-2)		
USA ACGIH	ACGIH (TLV) TWA	10 mg/m <sup>3</sup> (Total dust), 3 mg/m <sup>3</sup> (Respirable fraction)
USA OSHA	OSHA (PEL) TWA	15 mg/m <sup>3</sup> (Tptal dust), 5 mg/m <sup>3</sup> (Respirable fraction)
Barium Sulfate(7727-43-7)		
USA ACGIH	ACGIH (TLV)TWA	10 mg/m <sup>3</sup>
USA NIOSH	NIOSH (REL) TWA	5 mg/m <sup>3</sup>
USA OSHA	OSHA (OEL) TWA	15 mg/m <sup>3</sup>
Butyl Alcohol(71-36-3)		
USA ACGIH	ACGIH (TLV) TWA	20 ppm
USA NIOSH	NIOSH (REL) C	50 ppm, 150 mg/m <sup>3</sup>
USA OSHA	OSHA (OEL) TWA Table Z-1	100 ppm, 300 mg/m <sup>3</sup>
Calcium Carbonate(1317-65-3)		
USA NIOSH	NIOSH (TWA)	10 mg/m <sup>3</sup> , (Respirable dust)
USA NIOSH	NIOSH (TWA)	10 mg/m <sup>3</sup> , (Total dust)
USA OSHA	OSHA (TWA)	15 mg/m <sup>3</sup> , (Total dust)
USA OSHA	OSHA (TWA)	5 mg/m <sup>3</sup> , (Respirable fraction)
Carbon Black(1333-86-4)		
USA ACGIH	ACGIH TLV (mg/m <sup>3</sup> )	3.0 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (mg/m <sup>3</sup> )	3.5 mg/m <sup>3</sup>
Crystalline Silica(14808-60-7)		
USA ACGIH	ACGIH (TLV) TWA	.025 mg/m <sup>3</sup>
Diacetone Alcohol(123-42-2)		
USA ACGIH	ACGIH (TLV) TWA	50 ppm
USA NIOSH	NIOSH (REL) TWA	50 ppm, 240 mg/m <sup>3</sup>
USA OSHA	OSHA (OEL) TWA Table Z-1	50 ppm, 240 mg/m <sup>3</sup>
Isobutyl Alcohol(78-83-1)		
USA ACGIH	ACGIH TWA	50 ppm

USA OSHA	OSHA PEL	100 ppm, 300 mg/m3
Meta-Xylene(108-38-3)		
USA ACGIH	ACGIH STEL TLV (15 m)	150 ppm, 651 mg/m3
USA ACGIH	ACGIH TWA (8 h)	100 ppm, 434 mg/m3
USA OSHA	OSHA TWA (8 h)	100 ppm, 435 mg/m3
Methyl Amyl Ketone(110-43-0)		
USA ACGIH	ACGIH TLV TWA	50 ppm
USA OSHA	OSHA PEL (Table Z-1)	100 ppm, 465 mg/m3
Methyl Ethyl Ketoxime(96-29-7)		
USA WEEL	(WEEL) TWA	10 ppm
n-Butyl Acetate(123-86-4)		
USA ACGIH	ACGIH STEL	200 ppm
USA ACGIH	ACGIH TWA	150 ppm
USA OSHA	OSHA PEL (Table Z-1)	150 ppm, 710 mg/m3
O-Xylene(95-47-6)		
USA ACGIH	ACGIH (TLV) STEL	150 ppm
USA ACGIH	ACGIH (TLV) TWA	100 ppm
USA NIOSH	NIOSH (REL) ST	150 ppm, 655 mg/m3
USA NIOSH	NIOSH (REL) TWA	100 ppm, 435 mg/m3
USA OSHA	OSHA (OEL) TWA Table Z-1	100 ppm, 435 mg/m3
Para-Xylene(106-42-3)		
USA ACGIH	ACGIH (TLV) STEL	150 ppm
USA ACGIH	ACGIH (TLV) TWA	100 ppm
USA NIOSH	NIOSH (REL) ST	150 ppm, 650 mg/m3
USA NIOSH	NIOSH (REL) TWA	100 ppm, 435 mg/m3
USA OSHA	OSHA (OEL) TWA Table Z-1	100 ppm, 435 mg/m3
Phenylethane(100-41-4)		
USA ACGIH	ACGIH STEL	125 ppm
USA ACGIH	ACGIH TWA	20 ppm
USA NIOSH	NIOSH REL	100 ppm, 435 mg/m3
USA NIOSH	NIOSH REL (ST)	125 ppm, 545 mg/m3
USA OSHA	OSHA STEL	125 ppm, 545 mg/m3
USA OSHA	OSHA TWA (Table Z-1)	100 ppm, 435 mg/m3
Propyl Alcohol(71-23-8)		
USA NIOSH	NIOSH (REL) ST	250 ppm, 625 mg/m3
USA ACGIH	ACGIH (TLV) TWA	100 ppm
USA NIOSH	NIOSH (REL) TWA	200 ppm, 500 mg/m3
USA OSHA	OSHA (OEL) TWA - (Table Z-1)	200 ppm
Pseudocumene(95-63-6)		
USA NIOSH	NIOSH (TWA) REL	25 ppm, 125 mg/m3
Titanium Dioxide(13463-67-7)		
PEL (Permissible Exposure Limit)	OSHA TWA	15 mg/m3
TLV	ACGIH TWA	10 mg/m3
Xylene(1330-20-7)		
USA ACGIH	ACGIH STEL	150 ppm
USA ACGIH	ACGIH TWA	100 ppm
USA OSHA	OSHA TWA (Table Z-1)	100 PPM, 435 mg/m3

## PERSONAL PROTECTIVE EQUIPMENT

**RESPIRATORY PROTECTION :** If TLV of the product or any component is exceeded, a NIOSH approved dust respirator is advised in absence of environmental control. OSHA Regulations also permit other NIOSH dust respirators under specified conditions. (See your Safety Equipment Supplier) Engineering or administrative controls should be implemented to reduce exposure.

**HAND PROTECTION REMARKS :** The suitability for a specific workplace should be discussed with the producers of the protective gloves.

**EYES PROTECTION :** Eye wash bottle with pure water.  
Tightly fitting safety goggles.  
Where face-shield and protective suit for abnormal processing problems.

**SKIN AND BODY PROTECTION :** Wear impervious clothing. Choose body protection according to the amount and concentration of the dangerous substance at the work place.

**WORK HYGIENIC PRACTICES:** When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state</b>	:	Liquid
<b>Color</b>	:	Various colors depending on the pigmentation.
<b>Odor</b>	:	Characteristic. Sweet. Mint like.
<b>Odor threshold</b>	:	No data available.
<b>Ph</b>	:	N/A – See Technical Data Sheet
<b>Evaporation rate</b>	:	Slower Than Ether
<b>Melting point</b>	:	-94.7 C (-138.46 F)
<b>Freezing point</b>	:	No data available.
<b>Boiling point</b>	:	207.0 deg F TO 305.0 deg F
<b>Flash point</b>	:	55.00 deg F
<b>Lower explosion limit</b>	:	.8
<b>Upper explosion limit</b>	:	13.7
<b>Vapor pressure</b>	:	185 mm Hg
<b>Vapor density</b>	:	Heavier than air
<b>Relative density</b>	:	No data available.
<b>Density</b>	:	10.4706
<b>Solubility</b>	:	No data available.
<b>Partion coefficient: n-octanol/water</b>	:	No data available.
<b>Autoignition temperature</b>	:	No data available.
<b>Decomposition temperature</b>	:	No data available.

## 10. STABILITY AND REACTIVITY

**REACTIVITY :** No dangerous reaction known under conditions of normal use.

**CHEMICAL STABILITY :** Stable under normal conditions.

**CONDITIONS TO AVOID :** Heat, flames and sparks. Extremely high temperatures and direct sunlight.

**INCOMPATIBLE MATERIALS :** Avoid contact with strong oxidizing agents.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), dense black smoke.

## 11. TOXICOLOGICAL INFORMATION

<b>1,10-Phenanthroline(66-71-7)</b>	
LD50 Oral - Rat - Acute toxicity	132 mg/kg
<b>2-Ethylhexanoic acid(149-57-5)</b>	
Additional Information	RTECS: MO7700000 To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Stomach - Irregularities - Based on Human Evidence Stomach - Irregularities - Based on Human Evidence.
Aspiration hazard	No data available.
Carcinogenicity	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Germ cell mutagenicity	Human lymphocyte Sister chromatic exchange
Inhalation	No data available.
LD50 Dermal - Rabbit	1,142 mg/kg, Dermal, Rabbit
LD50 Oral - Rat - Acute toxicity	3,000 mg/kg, Oral, Rat
Reproductive toxicity	Suspected human reproductive toxicant no data available no data available Developmental Toxicity - rat - Oral Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Developmental Toxicity - rat - Oral Specific Developmental Abnormalities: Musculoskeletal system. Specific Developmental Abnormalities: Cardiovascular (circulatory) system. Specific Developmental Abnormalities: Urogenital system.
Respiratory or skin sensitization	No data available.
Serious eye	Eyes - rabbit Result: Severe eye irritation

damage/eye irritation	
Skin corrosion/irritation	No data available.
Specific target organ toxicity - repeated exposure	No data available.
Specific target organ toxicity - single exposure	No data available.
<b>ACETIC ACID, n-propyl ester(109-60-4)</b>	
Additional Information	RTECS: AJ3675000 prolonged or repeated exposure can cause, narcosis.
Aspiration hazard	No data available.
Carcinogenicity	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Germ cell mutagenicity	No data available.
LC50 Inhalation - Rat	32 mg/l, Rat - 4 h
LD50 Dermal - Rabbit	17,740 mg/kg, Rabbit
LD50 Oral - Rat - Acute toxicity	9,370 mg/kg, Remarks- Behavioral: Somnolence (general depressed activity). Skin and Appendages- Other: Hair.
Reproductive toxicity	No data available.
Respiratory or skin sensitization	No data available.
Serious eye damage/eye irritation	Eyes - Rabbit Result: Moderate eye irritation
Skin corrosion/irritation	Skin - Rabbit Result: No skin irritation
Specific target organ toxicity - repeated exposure	No data available.
Specific target organ toxicity - single exposure	May cause drowsiness or dizziness.
<b>Aliphatic Solvent(64742-47-8)</b>	
Acute Dermal toxicity	No data available.
Acute Inhalation toxicity	No data available.
Acute toxicity	No data available.
Additional Information	RTECS: Not available Prolonged or repeated exposure to skin causes defatting and dermatitis., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Aspiration hazard	No data available.
Carcinogenicity	IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Distillates (petroleum), hydrotrated light, kerosene - unspecified) NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Germ cell mutagenicity	Reverse mutation assay <i>S. typhimurium</i> Result: negative
Reproductive toxicity	No data available.
Respiratory or skin sensitization	Draize Test - Guinea pig Result: Does not cause skin sensitization.
Serious eye damage/eye irritation	Eyes - Rabbit Result: No eye irritation
Skin corrosion/irritation	Skin - Rabbit Result: No skin irritation - 4 h
Specific target organ toxicity - repeated exposure	No data available.
Specific target organ toxicity - single exposure	No data available.
<b>Aluminum Hydroxide(21645-51-2)</b>	
Additional Information	RTECS: BD0940000 Nausea, Vomiting, and Constipation.
Aspiration hazard	No data available.
Carcinogenicity	IARC: No components of this product present at levels greater than or equal to 0.1% is

	identified as probable, possible or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Dermal	No data available.
Germ cell mutagenicity	Mouse lymphocyte Result- negative Mutagenicity (micronucleus test) Rat - male Result: negative
Inhalation	No data available.
LD50 Oral - Rat - female - Acute toxicity	>5,000 mg/kg, Oral - Rat - female
Reproductive toxicity	No data available.
Respiratory or skin sensitization	Maximization Test (GPMT) - Guinea pig Result- Does not cause skin sensitization.(OECD Test Guideline 406)
Serious eye damage/eye irritation	Eyes - Rabbit Result: No eye irritation (OECD Test Guideline 405)
Skin corrosion/irritation	Skin - Rabbit Result: No skin irritation - 4 h (OECD Test Guideline 404)
Specific target organ toxicity - repeated exposure	No data available.
Specific target organ toxicity - single exposure	No data available.
<b>Amorphous Silica(7631-86-9)</b>	
Additional toxicological information	The product is not subject to classification according to internally approved calculation methods for preparations: When used and handled according to specifications, the product does not have any harmful effects according to our experience and information provided to us.
Irritant of skin	Not irritating (rabbit) (OECD 404)
Irritant of eyes	Not irritating (rabbit) (OECD 405)
LC0 - Inhalative	>140->2000 mg/m <sup>3</sup> / 4 h (Rat) (OECD 403)
LD50 - Dermal - Rabbit	>5000 mg/kg (Rabbit)
LD50 - Oral - Rat	>5000 mg/kg (Rat) (OECD 401)
Other information - Oral	=> 1340 mg/kg/day
Sensitization	Not sensitizing (guinea pig) (OECD 406)
<b>Barium Sulfate(7727-43-7)</b>	
Chronic Toxicity	No toxic effects known.
Irritation/corrosion	Product not irritating to eyes or skin.
LD50 Oral - Rat - Acute toxicity	>15,000 mg/kg
Sensitization	No sensitization known.
<b>Butyl Alcohol(71-36-3)</b>	
Additional Information	RTECS: EO1400000 drying, cracking of the skin, Skin irritation To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Stomach - Irregularities - Based on Human Evidence Stomach - Irregularities - Based on Human Evidence
Aspiration hazard	No data available
Carcinogenicity	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Germ cell mutagenicity	No data available
LC50 Inhalation Rat	8,000 ppm, Rat, 4 h
LD50 Dermal - Rabbit	3,400 mg/kg
LD50 Oral - Rat - Acute Toxicity	790 mg/kg, Liver:Fatty liver degeneration. Kidney, Ureter, Bladder:Other changes. Blood:Other changes.
Reproductive toxicity	No data available
Respiratory or skin sensitization	No data available
Serious Eye Damage and Irritation	Serious eye damage,eye irritation Eyes - Rabbit Result: Blindness (OECD Test Guideline 405)
Skin corrosion/irritation	Rabbit Result: Skin irritation - 24 h
Specific target organ toxicity - repeated exposure	No data available

Specific target organ toxicity - single exposure	May cause respiratory irritation. May cause drowsiness or dizziness
Carbon Black(1333-86-4)	
ACGIH	ACGIH The American Conference of Governmental Industrial Hygienists classifies carbon black as A4, Not Classifiable as a Human Carcinogen.
Carcinogenicity Classification	GHS- Not a hazardous substance or preparation according to the Global Harmonized System (GHS).
Human Epidemiology	Results of epidemiological studies of carbon black production workers suggest that cumulative exposure to carbon black may result in small decrements in lung function, as measured by FEV1. A recent U.S. respiratory morbidity study suggested a 27 mL decline in FEV1 from a 1 mg/m3 (inhalable fraction) exposure over a 40-year period. An older European investigation suggested an exposure to 1 mg/m3 (inhalable fraction) of carbon black over a 40-year working-lifetime will result in a 48 mL decline in FEV1. In contrast, normal age related decline over a similar period of time would be approximately 1200 ml. The relationship between symptoms and exposure to carbon black is less clear. In the U.S. study, 9% of the highest exposure group (in contrast to 5% of the unexposed group) reported symptoms consistent with chronic bronchitis. In the European study, methodological limitations in the administration of the questionnaire limit the drawing of definitive conclusions about symptoms.
Human Epidemiology - cont	Since this IARC evaluation of carbon black, Sorahan and Harrington 16) re-analyzed the UK study data using an alternative exposure hypothesis and found a positive association with carbon black exposure in two of the five plants. The same exposure hypothesis was applied by Morfeld and McCunney 17-18) to the German cohort; in contrast, they found no association between carbon black exposure and lung cancer risk and, thus, no support for the alternative exposure hypothesis used by Sorahan and Harrington 16).
Human Epidemiology - cont.	Morfeld and McCunney 19) applied a Bayesian approach to unravel the role of uncontrolled confounders and identified smoking and prior exposure to occupational carcinogens received before being hired in the carbon black industry as main causes of the observed lung cancer excess risk. Overall, as a result of these detailed investigations, no causative link between carbon black exposure and cancer risk in humans has been demonstrated. This view is consistent with the IARC evaluation in 2006. Several epidemiological and clinical studies of workers in the carbon black production industries show no evidence of clinically significant adverse health effects due to occupational exposure to carbon black. No dose response relationship was observed in workers exposed to carbon black.
Human Epidemiology - cont.	This study, however, indicated a link between carbon black and small opacities on chest films, with negligible effects on lung function. A study on carbon black production workers in the UK 10) found an increased risk of lung cancer in two of the five plants studied; however, the increase was not related to the dose of carbon black. Thus, the authors did not consider the increased risk in lung cancer to be due to carbon black exposure. A German study of carbon black workers at one plant 11-14) found a similar increase in lung cancer risk but, like the 2001 UK study 10), found no association with carbon black exposure. In contrast, a large US study 15) of 18 plants showed a reduction in lung cancer risk in carbon black production workers. Based upon these studies, the February 2006 Working Group at IARC concluded that the human evidence for carcinogenicity was inadequate 1) .!
IARC	IARC In 1995 IARC concluded, "There is inadequate evidence in humans for the carcinogenicity of carbon black." Based on rat inhalation studies IARC concluded that there is, "sufficient evidence in experimental animals for the carcinogenicity of carbon black," IARC's overall evaluation was that, "Carbon black is possibly carcinogenic to humans (Group 2B)". This conclusion was based on IARC's guidelines, which require such a classification if one species exhibits carcinogenicity in two or more studies. IARC performed another review in 2006, and again classified carbon black as possibly carcinogenic to humans (Group 2B). In its 1987 review IARC concluded, "There is sufficient evidence in experimental animals for the carcinogenicity of carbon black extracts." Carbon black extracts are classified as, possibly carcinogenic to humans (Group 2B).
LD50 (Rat)	>8000 mg/kg
Mutagenic Effects and Germ Cell Mutagenicity	In an experimental investigation, mutational changes in the heart gene were reported in alveolar epithelial cells in the rat following inhalation exposure to carbon black. This observation is believed to be rat specific and a consequence of "lung overload" which led to chronic inflammation and release of genotoxic oxygen species. This mechanism is considered to be a secondary genotoxic effect and thus, carbon black itself would not be considered to be mutagenic. Carbon black is not suitable to be tested in bacterial (Ames test) and other in vitro systems because of its insolubility in aqueous solutions. When tested, however, results for carbon black showed no mutagenic effects. Organic solvent extracts of carbon black can, however, contain traces of polycyclic aromatic hydrocarbons (PAHs). A study to examine the bioavailability of these PAHs showed that PAHs are very tightly bound to carbon black and not bioavailable.
NIOSH	NIOSH The U.S. National Institute of Occupational Safety and Health (NIOSH) 1978 criteria document on carbon black recommends that only carbon blacks with PAH contaminant levels greater than 0.1% require the measurement of PAHs in air. As some PAHs are possible human carcinogens, NIOSH recommends an exposure limit of 0.1 mg/m3 for PAHs in air, measured as the cyclohexane-extractable fraction.

NTP	NTP Carbon black is not designated a carcinogen by the U.S. National Toxicology Program (NTP), the U.S. Occupational Safety and Health Administration (OSHA) or the European Union (EU).
Reproductive and Teratogenic Effects	No experimental studies on effects of carbon black on fertility and reproduction have been located. However, based on toxicokinetic data, carbon black is deposited in the lungs and based on its specific physicochemical properties (insolubility, low absorption potential), it is not likely to distribute in the body to reach reproductive organs, embryo and/or fetus under in vivo conditions. Therefore, no adverse effects of carbon black to fertility/reproduction or to fetal development are expected. No effects have been reported in long-term animal studies.
Sensitization	No animal data is available. No cases in humans have been reported.
STOT- repeated exposure	Therefore, no STOT, Repeated exposure classification is made.
STOT- single exposure	Inhalation studies with the rat showed lung effects (see Section 11.2 and 11.3), these effects are believed to be the effects of "lung overload" 1 and these effects are believed to be specific to the species. In addition, the European CLP Regulation states that no classification is necessary if the mechanism is not relevant to humans. 4) Also, the CLP Guidance on classification and labeling states that the "lung overload" mechanism is not relevant to humans. 4) Therefore, no STOT, Repeated Exposure classification is made
<b>Crystalline Silica(14808-60-7)</b>	
Acute toxicity - Dermal	No data available.
Acute toxicity - Inhalation	No data available.
Additional Information	RTECS: VV7330000 Prolonged inhalation of crystalline silica may result in silicosis, a disabling pulmonary fibrosis characterized by fibrotic changes and miliary nodules in the lungs, a dry cough, shortness of breath, emphysema, decreased chest expansion, and increased susceptibility to tuberculosis. In advanced stages, loss of appetite, pleuritic pain, and total incapacity to work. Advanced silicosis may result in death due to cardiac failure or destruction of lung tissue. Crystalline silica is classified as group 1 "known to be carcinogenic to humans" by IARC and "sufficient evidence" of carcinogenicity by the NTP., The chronic health risks are associated with respirable particles of 3-4 um over protracted periods of time. Currently, there is a limited understanding of the mechanisms of quartz toxicity, including its mechanisms for lung carcinogenicity.
Additional Information (cont.)	Additional studies are needed to determine whether the cell transforming activity of quartz is related to its carcinogenic potential. Liver - Irregularities - Based on Human Evidence Liver - Irregularities - Based on Human Evidence.
Aspiration hazard	No data available.
Carcinogenicity	Limited evidence of carcinogenicity in human studies IARC: 1 - Group 1: Carcinogenic to humans (Quartz) ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: Known to be human carcinogen (Quartz) OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Germ Cell mutagenicity	No data available.
Reproductive toxicity	No data available.
Respiratory or skin sensitization	No data available.
Serious eye damage/eye irritation	No data available.
Skin corrosion/irritation	No data available.
Specific target organ toxicity - repeated exposure	Inhalation - May cause damage to organs through prolonged or repeated exposure.
Specific target organ toxicity - single exposure	No data available.
<b>Diacetone Alcohol(123-42-2)</b>	
Additional Information	RTECS: SA9100000 Central nervous system depression, Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness., Blood disorders, Dermatitis, Blurred vision, Effects due to ingestion may include:, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Stomach - Irregularities - Based on Human Evidence Stomach - Irregularities - Based on Human Evidence.
Aspiration hazard	No data available.
Carcinogenicity	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Germ cell mutagenicity	No data available.

LC50 Inhalation - Rat	>10 mg/l, Inhalation - Rat -4 h.
LC50 Oral - Rat - Acute Toxicity	2,520 mg/kg, Oral - Rat - Remarks: Behavioral: Tremor. Behavioral: Convulsions or effect on seizure threshold. Liver: Other changes.
LD50 Dermal - Rabbit	13,500 mg/kg, Dermal - Rabbit
Reproductive toxicity	No data available.
Respiratory or skin sensitization	No data available.
Serious eye damage/eye irritation	Eyes - Rabbit Result: Severe eye irritation - 24 h
Skin corrosion/irritation	No data available.
Specific target organ toxicity - repeated exposure	No data available.
Specific target organ toxicity - single exposure	No data available.
<b>Isobutyl Alcohol(78-83-1)</b>	
Carcinogenicity Data:	The ingredient(s) of this product is (are) not classified as carcinogenic by ACGIH, IARC, OSHA or NTP.
LC50 Inhalation - Rat	8000 ppm; (4 h)
LD50 Dermal - Rabbit	3400 mg/kg
LD50 Oral - Rat (Acute Toxicity)	2460 mg/kg
Mutagenicity Data:	No adverse mutagenicity effects are anticipated.
Reproductive Data:	No adverse reproductive effects are anticipated.
Respiratory / Skin Sensitization Data:	None known.
Synergistic Materials:	Alcohols may interact synergistically with chlorinated solvents (example - carbon tetrachloride, chloroform, bromotrichloromethane), dithiocarbamates (example - disulfiram), dimethylnitrosamine and thioacetamide.
Tetragenicity Data:	No adverse Tetragenicity effects are anticipated.
<b>Meta-Xylene(108-38-3)</b>	
Additional Information	RTECS: ZE2275000 Liver injury may occur., Kidney injury may occur., Blood disorders, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, narcosis, Lung irritation, chest pain, pulmonary edema, Central nervous system depression, Dermatitis, Gastrointestinal disturbance.
Aspiration hazard	May be fatal if swallowed and enters airways.
Carcinogenicity	This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification. IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (m-Xylene) NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product presents at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Germ cell mutagenicity	No data available.
LC50 Inhalation (Rat, Male)	6700 ppm, 4 h - (Directive 67/548/EEC, Annex V, B.2.)
LD50 Dermal (Rabbit, Male)	12,126 mg/kg Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2). No data available.
LD50 Oral (Rat, Male)	6,602 mg/kg (OECD Test Guideline 401)
Reproductive toxicity	Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.
Respiratory or skin sensitization	Mouse Result: Does not cause skin sensitization. (OECD Test Guideline 429)
Serious eye damage/eye irritation	Eyes - Rabbit Result: Severe eye irritation - 24 h
Skin corrosion/irritation	Skin - Rabbit Result: Skin irritation - 24 h
Specific target organ toxicity - repeated exposure	No data available.
Specific target organ toxicity - single exposure	Inhalation - May cause respiratory irritation.
<b>Methyl Amyl Ketone(110-43-0)</b>	
Aspiration hazard	May be harmful if swallowed and enters airways.
Carcinogenicity	No data available.
LD50 Dermal - (Rat)	>2,000 mg/kg
LD50 Inhalation - (Rat)	>16.7 mg/l (4 h)
LD-50 Oral - (Rat)	1,600 mg/kg

Mutagenicity	In vitro, No data available., In vivo, No data available.
Other adverse effects	No data available.
Repeated dose toxicity	No data available.
Reproductive toxicity	No data available.
Respiratory or skin sensitization	Skin Sensitization:, (Mouse) - non-sensitizing.
Serious eye damage/eye irritation	(Rabbit, 24 h): slight.
Skin corrosion/irritation	(Rabbit, 24 h): moderate.
Specific target organ toxicity - repeated exposure	No data available.
Specific target organ toxicity - single exposure	No data available.
<b>Methyl Ethyl Ketoxime(96-29-7)</b>	
Additional Information	Repeated dose toxicity - Rat - male - Drinking - No observed adverse effect level - 25 mg/kg Repeated dose toxicity - Rat - male and female - inhalation (vapour) - No observed adverse effect level - 0.009 mg/kg RTECS: EL9275000 To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Aspiration hazard	No data available.
Carcinogenicity	Limited evidence of carcinogenicity in animal studies IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Germ cell mutagenicity	in vitro assay <i>S. typhimurium</i> Result: negative <i>Drosophila melanogaster</i> - male Result: negative.
LC50 Inhalation - Rat - male & female	4.83 mg/l, 4 h, Rat - male & female (OECD Test Guideline 403)
LD50 Dermal - Rabbit	1,000 - 1,800 mg/kg
LD50 Oral - Rat - Acute toxicity	2,236 mg/kg, Oral - Rat - (OECD Test Guideline 401)
Reproductive toxicity	No data available.
Respiratory or skin sensitization	Buehler Test - Guinea pig May cause sensitization by skin contact. (OECD Test Guideline 406)
Serious eye damage/eye irritation	Eyes - Rabbit Result- Risk of serious damage to eyes. (OECD Test Guideline 405)
Skin corrosion/irritation	Skin - Rabbit Result: No skin irritation (OECD Test Guideline 404)
Specific target organ toxicity - repeated exposure	No data available.
Specific target organ toxicity - single exposure	No data available.
<b>n-Butyl Acetate(123-86-4)</b>	
Aspiration hazard	No data available.
Carcinogenicity	No data available.
Inhalation	No data available.
LD-50 Dermal - (Rabbit)	> 16ml/kg
LD-50 Oral - (Rat)	14,130 mg/kg
Mutagenicity	In vitro: No data available. In vivo: No data available.
Other adverse effects:	No data available.
Repeated dose toxicity	No data available.
Reproductive toxicity	No data available.
Respiratory or skin sensitization	Skin Sensitization:, (Guinea Pig) - non-sensitizing.
Serious eye damage/eye irritation	(Rabbit, 24 h): none
Skin corrosion/irritation	(Rabbit, 24 h): none
Specific target organ toxicity - repeated exposure	No data available.
Specific target organ	Narcotic effect.

toxicity - single exposure	
<b>O-Xylene(95-47-6)</b>	
Additional Information	RTECS: ZE2450000 narcosis, Lung irritation, chest pain, pulmonary edema, Central nervous system depression, Dermatitis, Gastrointestinal disturbance, Liver injury may occur., Kidney injury may occur., Blood disorders Nerves. -
Aspiration hazard	May be fatal if swallowed and enters airways.
Carcinogenicity	This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification. IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (o-Xylene) NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Dermal -	No data available.
Germ cell mutagenicity	Ames test Salmonella typhimurium Result: negative
LC50 - Inhalation - Rat - Male	>18,800 mg/m3, Rat - male - 6 h
LD50 - Intraperitoneal - Mouse -	1,364 mg/kg, Mouse
Oral - Acute Toxicity	No data available.
Reproductive toxicity	No data available.
Respiratory or skin sensitization	Mouse Result: Does not cause skin sensitization. (OECD Test Guideline 429)
Serious eye damage/eye irritation	No data available.
Skin corrosion/irritation	Skin - Rabbit Result: Irritating to skin. - 24 h
Specific target organ toxicity - repeated exposure	No data available.
Specific target organ toxicity - single exposure	No data available.
<b>Para-Xylene(106-42-3)</b>	
Additional Information	RTECS: ZE2625000 narcosis, Lung irritation, chest pain, pulmonary edema, Central nervous system depression, Gastrointestinal disturbance, Liver injury may occur., Kidney injury may occur., Blood disorders Stomach - Irregularities - Based on Human Evidence Stomach - Irregularities - Based on Human Evidence.
Aspiration hazard	No data available.
Carcinogenicity	IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (p-Xylene) NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Germ cell mutagenicity	No data available.
LC50 - Inhalation - Rat	4,550 ppm, Rat - 4 h
LD50 - Oral - Rat - Acute toxicity	5,000 mg/m3, Oral - Rat
LD50 - Oral - Rat -Male	3,253 mg/kg, Oral - Rat - Male
Reproductive toxicity	No data available. May cause reproductive disorders.
Respiratory or skin sensitization	No data available.
Serious eye damage/eye irritation	No data available.
Skin corrosion/irritation	Skin - Rabbit Result: Moderate skin irritation - 4 h
Specific target organ toxicity - repeated exposure	No data available.
Specific target organ toxicity - single exposure	No data available.
<b>Phenylethane(100-41-4)</b>	
Aspiration toxicity	May be fatal if swallowed and enters airways.
Carcinogenicity	Species: mouse, (male and female) Application Route: Inhalation Exposure time: 103 wk Activity duration: 6 h Dose: 0, 75, 250, 750 ppm Frequency of Treatment: 5 days/week NOAEL: 250 ppm Method: OECD Test Guideline 453 Result: evidence of carcinogenic activity Symptoms: increased incidences of alveolar/bronchiolar neoplasms, increase incidence of hepatocellular carcinomas GLP: yes Carcinogenicity - Assessment : Carcinogenicity classification not possible from current data.

Germ cell mutagenicity	Genotoxicity in vitro, Test Type: Chromosome aberration test in vitro Test species: Chinese hamster ovary (CHO) Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 473 Result: negative GLP: no : Test Type: Mammalian cell gene mutation assay Test species: mouse lymphoma cells Metabolic activation: with and without metabolic activation Method : OECD Test Guideline 476 Result: negative GLP: yes Genotoxicity in vivo : Test Type: In vivo micronucleus test Test species: mouse (male) Application Route: Oral Method: OECD Test Guideline 474 Result: negative GLP: yes Test Type: DNA damage and/or repair Test species: mouse (male and female)Application Route: Inhalation Method: OECD Test Guideline 486 Result: negative GLP: yes Germ cell mutagenicity Assessment : In vivo tests did not show mutagenic effects
LC50 (Mouse, Male)	10 mg/l Assessment: The component/mixture is moderately toxic after short term inhalation.
LD50 (rabbit)	15,433 mg/kg
Repeated dose toxicity	Species: rat, male and female NOAEL: 75 mg/kg Application Route: Oral Exposure time: 28 d Dose: 75, 250 and 750 mg/kg bw/day Method: OECD Test Guideline 407 GLP: yes Symptoms: Increased kidney and liver weights
Reproductive toxicity	Effects on fertility : Test Type: One generation study Species: rat, male and female Application Route: Inhalation Dose: 0, 100, 500 and 1000 ppm Duration of Single Treatment: 6 h General Toxicity - Parent: NOAEC: 1,000 ppm General Toxicity F1: NOAEC: 100 ppm Symptoms: Reduced fetal weight. Reduced offspring weight gain. Method: OECD Test Guideline 415 Result: No reproductive effects. GLP: yes Effects on fetal development : Species: rat Application Route: Inhalation Dose: 0, 100, 500, 1000, 2000 ppm Duration of Single Treatment: 15 d General Toxicity Maternal: NOAEC: 500 ppm Teratogenicity: NOAEC: 2,000 ppm Developmental Toxicity: NOAEC: 500 ppm Symptoms: Reduced body weight Method: OECD Test Guideline 414 Result: Developmental toxicity occurred at maternal toxicity dose levels GLP: No data available Reproductive toxicity - Assessment : No toxicity to reproduction Did not show teratogenic effects in animal experiments.
Respiratory or skin sensitization	Remarks: No data available
Serious eye damage/eye irritation	Species: rabbit Result: Mild eye irritation Remarks: No data available
Skin corrosion/irritation	Species: rabbit Result: Mild skin irritation
STOT - repeated exposure	Target Organs: Auditory system Assessment: May cause damage to organs through prolonged or repeated exposure. The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.
STOT - single exposure	No data available.
<b>Propyl Alcohol(71-23-8)</b>	
Additional Information	RTECS: UH8225000 Central nervous system depression, prolonged or repeated exposure can cause:, narcosis, Skin irritation Stomach - Irregularities - Based on Human Evidence Stomach - Irregularities - Based on Human Evidence.
Aspiration hazard	No data available.
Carcinogenicity	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Germ cell mutagenicity	No data available.
LC50 Dermal - Rabbit	4,000 mg/kg, Rabbit, (OECD Test Guideline 402)
LC50 Inhalation - Rat	20,000 ppm, Rat (1 h)
LD50 Oral -Rat - Acute Toxicity	8,038 mg/m3, (OECD Test Guideline 401)
Reproductive toxicity	No data available.
Respiratory or skin sensitization	Maximization Test (GPMT) - Guinea pig Result: Did not cause sensitization on laboratory animals.
Serious eye damage/eye irritation	Eyes - Rabbit Result: Severe eye irritation (OECD Test Guideline 405)
Skin corrosion/irritation	Skin - Rabbit Result: No skin irritation (OECD Test Guideline 404)
Specific target organ toxicity - repeated exposure	No data available.
Specific target organ toxicity - single exposure	May cause drowsiness or dizziness.
<b>Pseudocumene(95-63-6)</b>	
Additional Information	RTECS: DC3325000 prolonged or repeated exposure can cause:, narcosis, Bronchitis., Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Central nervous system
Carcinogenicity	IARC: No component of this product present at levels greater than or equal to 0.1% is identified

	as probable, possible or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Dermal:	No data available
Germ cell mutagenicity	in vitro assay <i>S. typhimurium</i> Result: negative Mutagenicity (micronucleus test) Rat - male and female - Bone marrow Result: negative
Inhalation:	No data available.
LD50 Oral - Rat - Acute toxicity	6,000 mg/kg, Rat - male.
Reproductive toxicity	No data available.
Respiratory or skin sensitization	No data available.
Serious eye damage/eye irritation	No data available.
Skin corrosion/irritation	No data available
Specific target organ toxicity - repeated exposure	No data available.
Specific target organ toxicity - single exposure	No data available.
<b>Titanium Dioxide(13463-67-7)</b>	
Carcinogenicity	In lifetime inhalation studies rats were exposed for 2 years to respectively 10, 50, 250 mg/m <sup>3</sup> of respirable TiO <sub>2</sub> .
Dermal ALD (rabbit)	>10000 mg/m <sup>3</sup>
Eye irritation	slight irritation
Inhalation 4 h ALC	>6.82 mg/l
ORAL ALD (rat)	>2400 mg/kg
Sensitisation	Did not cause sensitisation on laboratory animals.
Skin irritation	slight irritation
<b>Xylene(1330-20-7)</b>	
Acute dermal toxicity	Acute toxicity estimate : 1,100 mg/kg Method: Expert judgment.
Acute inhalation toxicity	Acute toxicity estimate, 4631 ppm Exposure time, 4 h Test atmosphere: gas Method; Calculation method.
Acute toxicity Product	Acute oral toxicity : Acute toxicity estimate : 3,523 mg/kg Method: Calculation method.
Aspiration Toxicity	May be fatal if swallowed and enters airways.
Carcinogenicity	Species: mouse, (male and female) Application Route: Oral Exposure time: 103 wk Dose: 0, 500 or 1000 mg/kg Frequency of Treatment: 5 days/week Method: Directive 67/548/EEC, Annex V, B.32. Result: did not display carcinogenic properties GLP: No data available, Carcinogenicity - Assessment : Animal testing did not show any carcinogenic effects.
Germ cell mutagenicity	Test Type: Chromosome aberration test in vitro. Test Species: Chinese hamster ovary (CHO) Metabolic Activation: With and without metabolic activation. Method Mutagenicity (in vitro mammalian cytogenetic test) Result: Negative. Test Type: Sister chromatid exchange assay in mammalian cells.
Germ cell mutagenicity Assessment	Animal testing did not show any mutagenic effects.
LC50 (rat, male) Inhalation	6700 ppm Exposure time: 4 h Method: Directive 67/548/EEC, Annex V, B.2. GLP: No data available Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation. Remarks: Acutely Toxic Category 4
LC50 (rat, male) Oral	3,523 mg/kg Method: EU Method B.1 (Acute Toxicity, Oral) Target Organs: Kidney, Bladder GLP: no
Repeated dose toxicity	Species: rat, male and female NOAEL: 250 mg/kg Application Route: Oral Exposure time: 103 wk Number of exposures: 5 d/wk Dose: 0, 250 or 500 mg/kg Assessment: The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.
Reproductive toxicity	Effects on fertility : Test Type: Two-generation study Species: rat, male and female Application Route: Inhalation Dose: 0, 25, 100 and 500 ppm Duration of Single Treatment: 6 h Frequency of Treatment: 7 days/week General Toxicity - Parent: NOAEC: > 500 ppm General Toxicity F1: NOAEC: > 500 ppm Early Embryonic Development: NOAEC: > 500 ppm Result: No reproductive effects. Effects on fetal development : Species: rat Application Route: Inhalation Dose: 0, 100, 500, 1000 or 2000 ppm Duration of Single Treatment: 14 d Frequency of Treatment: 6 hr/day General Toxicity Maternal: NOAEC: 500 ppm Teratogenicity: NOAEC: > 2,000 Developmental Toxicity: NOAEC: 100 ppm Result: No teratogenic effects., Developmental toxicity occurred at maternal toxicity dose levels Reproductive toxicity - Assessment : Animal testing did not show any effects on fertility. Damage to fetus not classifiable
Respiratory or skin	Remarks: No data available

sensitization	
Serious eye damage/eye irritation	Species: rabbit Result: Mild eye irritation
Skin corrosion/irritation	Species: rabbit Exposure time: 24 h Result: Irritating to skin Remarks: Skin irritation, Category 2
STOT - repeated exposure	Target Organs: Liver, Kidney, Central nervous system Assessment: May cause damage to organs through prolonged or repeated exposure.
STOT - single exposure	No data available.

## 12. ECOLOGICAL INFORMATION

<b>2-Ethylhexanoic acid(149-57-5)</b>	
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No data available.
Persistence and degradability	No data available.
Results of PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
Toxicity	No data available.
<b>ACETIC ACID, n-propyl ester(109-60-4)</b>	
Bioaccumulative potential	Does not bioaccumulate.
EC50 - Daphnia magna - Toxicity to daphnia and other aquatic invertebrates	318 mg/l - 24 h, Daphnia magna (Water flea)
LC50 - Pimephales promelas - Toxicity to fish	56 - 64 mg/l - 96 h, Pimephales promelas (fathead minnow)
Mobility in soil	No data available.
Other adverse effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.
Persistence and degradability	Biodegradability Result: - Readily biodegradable
Results of PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
<b>Aliphatic Solvent(64742-47-8)</b>	
Bioaccumulative potential	No data available.
EC50 (Daphnia Magna) Toxicity to daphnia and other aquatic invertebrates	1.4 mg/l - 48 h, - Daphnia magna (Water flea), (OECD Test Guideline 202)
LC50 (Rainbow trout) Toxicity to fish	2.9 mg/l - 96 h, Oncorhynchus mykiss (rainbow trout)
Mobility in soil	No data available.
Other adverse effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life. No data available.
Persistence and degradability	No data available.
Results of PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
<b>Aluminum Hydroxide(21645-51-2)</b>	
Bioaccumulative potential	Inert material.
EC50 - Daphnia - Toxicity to daphnia and other aquatic invertebrates	>10,000 mg/l, Daphnia magna ( Water flea) (OECD Test Guideline 202)
EC50 - Fish - Toxicity to fish	>10,000 mg/l, Fish
Mobility in soil	Inert material.
NOEC - Toxicity to algae	>0.004 mg/l, 72 h, Pseudokirchneriella subcapitata (algae) - (OECD Test Guideline 201)
Other adverse effects	None known.
Persistence and	Non-degradable

degradability	
<b>Amorphous Silica(7631-86-9)</b>	
Additional ecological information	General notes: Do not allow product to reach ground water, water course or sewage system.
Bioaccumulative potential	No further relevant information available.
EC50 - Algae	>10000 mg/l ( <i>Scenedesmus subspicatus</i> ) (72 h) (OCED 201) comparable substance
EC50 - Daphnia magna	>1000 mg/l ( <i>Daphnia magna</i> ) (24 h) (OCED 202)
LCO - Zebra fish	10000 mg/l (zebra fish) (96 h) (static) (OCED203)
Mobility in soil	No further relevant information available.
Persistence and degradability	The product is chemically and biologically inert. By the insolubility in water there is a separation at every filtration and sedimentation process.
<b>Barium Sulfate(7727-43-7)</b>	
Bioaccumulative potential	The product is practically insoluble in water and not biodegradable.
Mobility in soil	No information.
Other adverse effects	No information.
Persistence and degradability	The methods for determining biodegradability are not applicable to inorganic substances.
Results of PBT and vPvB assessment	According to Annex XIII of regulation (EC) 1907/2006 a PBT and VPvB shall not be conducted for inorganic substances. Barium sulfate is an inorganic substance, thus a PBT and vPvB assessment is not required.
Toxicity - Aquatic toxicity	Not known.
<b>Butyl Alcohol(71-36-3)</b>	
Bioaccumulative potential	Bioaccumulation <i>Oncorhynchus mykiss</i> (rainbow trout) - 24 h - 921 mg/l
EC50 <i>Daphnia magna</i> Toxicity to <i>Daphnia</i> and other aquatic invertebrates	1,983 mg/l - 48 h <i>Daphnia magna</i> (Water Flea)
LC50 <i>Pimephales promelas</i> - toxicity to fish	1,840 mg/l - 96 h, <i>Pimephales promelas</i> (fathead minnow)
Mobility in Soil	No data available
Other adverse effects	No data available
Persistence and degradability	No data available
Result of PBT and vPvB assessment not required/not conducted	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
<b>Carbon Black(1333-86-4)</b>	
Behavior in water treatment plants	Activated sludge, EC0 (3 h) > 800 mg/L. DEV L3 (TTC test)
Bioaccumulation Potential	Potential bioaccumulation is not expected because of the physicochemical properties of the substance
EC50 ( <i>Scenedesmus subspicatus</i> )	> 10,000 mg/L, OECD (Guideline 201)
EC50 <i>Daphnia magna</i> (waterflea)	>5600 mg/l (24 h) OECD (Guideline 202)
Environmental fate	Carbon black is an inert solid, stable and insoluble in water or organic solvents. Its vapour pressure is negligible. Based on these properties it is expected that carbon black will not occur in air or water in relevant amounts. Also potential for distribution via water or air can be dismissed. The deposition in soil or sediments is therefore the most relevant compartment of fate in the environment.
LC50 <i>Brachydanio reio</i> (zebrafish)	>1000 mg/l (96 h) OECD (Guideline 203)
NOEC 50 ( <i>Scenedesmus subspicatus</i> )	> 10,000 mg/L, OECD (Guideline 201)
<b>Crystalline Silica(14808-60-7)</b>	
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No data available.
Persistence and degradability	No data available.
Results of PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Toxicity	No data available.
<b>Diacetone Alcohol(123-42-2)</b>	
Bioaccumulative potential	No data available.
EC50 - Daphnia magna - Toxicity to daphnia and other aquatic invertebrates	9,000 mg/l - 24 h, Daphnia magna (Water flea)
LC50 - Lepomis macrochirus - Toxicity to fish	420 mg/l - 96 h, Lepomis macrochirus (Bluegill)
Mobility in soil	No data available.
Other adverse effects	No data available.
Persistence and degradability	No data available.
Results of PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
<b>Isobutyl Alcohol(78-83-1)</b>	
Chronic	No data available.
Degradability / Persistence; Biological / A biological Degradation	Evaluation: Not readily biodegradable (by OECD criteria).
EC50 - Aquatic Plants	>100 mg/l (72 h) The product has not been tested. The statement has been derived from properties of the individual components.
EC50 - Daphnia - Acute	>100 mg/l ( 48 h) The product has not been tested. The statement has been derived from properties of the individual components.
LC50 - Fish - Acute	>100 mg/l (96 h) The product has not been tested. The statement has been derived from properties of the individual components.
Microorganisms	Toxicity to microorganisms: bacteria EC10 (17 h): >750 mg/l. The product has not been tested. The statement has been derived from properties of the individual components.
<b>Meta-Xylene(108-38-3)</b>	
Bioaccumulative potential	Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.
LC50 (Fish)	11.23 mg/l - 96 h (OECD Test Guideline 203)
Mobility in soil	No data available.
Other adverse effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life with long lasting effects.
Persistence and degradability	No data available.
Results of PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
Toxicity to algae	Remarks: No data available
Toxicity to daphnia and other aquatic invertebrates	Remarks: No data available.
<b>Methyl Amyl Ketone(110-43-0)</b>	
Aquatic invertebrates	No data available.
Bioaccumulative potential	No data available.
Chronic Toxicity (Fish)	No data available.
ErC50 (Selenastrum capricornutum)	98.2 mg/l, 72 h
LC50 (Fathead Minnow) Acute toxicity	131 mg/l , (96 h)
Mobility in soil	No data available.
Persistence and degradability	69 % (28 d, Ready Biodegradability - CO2 in Sealed Vessels (Headspace Test)). Biological Oxygen Demand BOD-5: 1,770 mg/g BOD-20: 2,000 mg/g , Chemical Oxygen Demand: 2,420 mg/g, BOD/COD ratio No data available.
Results of PBT and vPvB assessment	No data available.
<b>Methyl Ethyl Ketoxime(96-29-7)</b>	
Bioaccumulative potential	Bioaccumulation Cyprinus carpio (Carp) - 42 d - 2 mg/l Bioconcentration factor (BCF): 0.5 - 0.6 (OECD Test Guideline 305C)
EC50 - Daphnia magna - Toxicity to daphnia and other aquatic invertebrates	>100 mg/l, 48 h, Daphnia magna (Water flea) - (OECD Test Guideline 202)
EC50 - Scenedesmus	11.6 mg/l, 72 h, Scenedesmus capricornutum (fresh water algae) - (OECD Test Guideline 201)

capricornutum - Toxicity to algae	
LC50 - Oryzias latipes - Toxicity to fish	>100 mg/l, 96 h, - Oryzias latipes - (OECD Test Guideline 203)
Mobility in soil	No data available.
Other adverse effects	No data available.
Persistence and degradability	MEKO has been determined to be biodegradable.
Results of PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
<b>n-Butyl Acetate(123-86-4)</b>	
Bioaccumulative potential	No data available.
Chronic Toxicity	Fish: No data available. Aquatic invertebrates: No data available. Toxicity to Aquatic Plants: No data available.
LC-50 (Fathead Minnow) Acute Toxicity	18 mg/l, (96 h)
LC-50 (Water Flea) Aquatic invertebrates	44 mg/l , (48 h)
Mobility in soil	Known or predicted distribution to environmental compartments: No data available.
Other adverse effects	No data available.
Persistence and degradability	83 % (28 d), Biological Oxygen Demand:BOD-5: 730 mg/g, Chemical Oxygen Demand:1,010 mg/g, BOD/COD ratio:72 %.
Results of PBT and vPvB assessment	No data available.
<b>O-Xylene(95-47-6)</b>	
Bioaccumulative potential	No data available.
LC50 - Lepomis macrochirus - Toxicity	16.10 mg/l, 96 h, Lepomis macrochirus (Bluegill)
Mobility in soil	No data available.
Other adverse effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life with long lasting effects.
Persistence and degradability	Biodegradability aerobic - Exposure time 28 d Result: 69.67 % - Not readily biodegradable. (OECD Test Guideline 301F) Remarks: The 10 day time window criterion is not fulfilled.
Results of PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
<b>Para-Xylene(106-42-3)</b>	
Bioaccumulative potential	No data available.
EC50 - Daphnia magna - Toxicity to daphnia and other aquatic invertebrates	35.50 - 63.10 mg/l - 48 h, Daphnia magna (Water flea)
EC50 - Pseudokirchneriella subcapitata - Toxicity to algae	3.20 - 4040 mg/l - 72 h, Pseudokirchneriella subcapitata (green algae)
LC50 - Carassius auratus - Toxicity to fish	18.00 mg/l - 24 h, Carassius auratus (goldfish)
LC50 - Oncorhynchus mykiss - Toxicity to fish	2.60 mg/l - 96 h, Oncorhynchus mykiss (rainbow trout)
Mobility in soil	No data available.
Other adverse effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life.
Persistence and degradability	Biodegradability Result: 87.8 % - Readily biodegradable
Results of PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
<b>Phenylethane(100-41-4)</b>	
Bioaccumulative potential	Partition coefficient: noctanol/water : log Pow: 2.92
EC50 (Daphnia magna (Water flea))	1.8 mg/l Exposure time: 48 h Test Type: static test
EC50 (Pseudokirchneriella subcapitata)	5.4 mg/l Exposure time: 72 h Test Type: static test Analytical monitoring: yes Method: Static GLP: yes

LC50 (Oncorhynchus mykiss (rainbow trout))	4.2 mg/l Exposure time: 96 h Test Type: semi-static test
Mobility in soil	No data available.
Other adverse effects	Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT). This substance is not considered to be very persistent nor very bioaccumulating (vPvB).
Persistence and degradability	Biodegradability : Inoculum: activated sludge Concentration: 22 mg/l Result: Readily biodegradable. Biodegradation: 70 % Exposure time: 28 d GLP: yes
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	(Daphnia): 3.6 mg/l Toxicity to bacteria : GLP: Remarks: No data available Ecotoxicology Assessment Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.
<b>Propyl Alcohol(71-23-8)</b>	
Bioaccumulative potential	The product is miscible in water and readily biodegradable in both water and soil. Accumulation is not expected.
EC50 Daphnia magna - Toxicity to daphnia and other aquatic invertebrates	3,642 mg/l, (48 h), Daphnia magna (Water flea), (DIN 38412)
EC50 Pseudokirchneriella subcapitata - Toxicity to algae	9,170 mg/l, (48 h), Pseudokirchneriella subcapitata (green algae)
LC50 - Pimephales promelas - Toxicity to Fish	4,555 mg/l, (96 h), Pimephales promelas (fathead minnow) - (OECD Test Guideline 203)
Mobility in soil	No data available.
Other adverse effects	No data available.
Persistence and degradability	Biodegradability Result: 75 % - Readily biodegradable Ratio BOD/ThBOD < 2 %
Results of PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
<b>Pseudocumene(95-63-6)</b>	
Bioaccumulative potential	No data available.
EC50 - Daphnia magna (Water flea) - Toxicity to daphnia and other aquatic invertebrates static test	3.6 mg/l - 48 h (OECD Test Guideline 202), Daphnia magna (Water flea)
LC50 - Pimephales promelas (fathead minnow) - Toxicity to fish	7.72 mg/l - 96.0 h, Pimephales promelas (fathead minnow)
Mobility in soil	No data available.
Other adverse effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.
Persistence and degradability	No data available.
Results of PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
<b>Titanium Dioxide(13463-67-7)</b>	
LC50 fish	Fathead minnow 96 h >1000 mg/l
<b>Xylene(1330-20-7)</b>	
Bioaccumulative potential	Partition coefficient: noctanol/water : log Pow: 2.77 - 3.15
EC50 (Pseudokirchneriella subcapitata)	4.36 mg/l End point: Growth rate Exposure time: 73 h Test Type: static test Analytical monitoring: yes
IC50 (Daphnia magna (Water flea))	1 mg/l Exposure time: 24 h Test Type: static test substance: Information given is based on data obtained from similar substances. Method: OECD Test Guideline 202 GLP
LC50 (Oncorhynchus mykiss (rainbow trout))	2.6 mg/l Exposure time: 96 h Test substance: Information given is based on data obtained from similar substances. Method: OECD Test Guideline 203 GLP: No data available
Mobility in soil	No data available.
Persistence and degradability	Biodegradability : Inoculum: activated sludge Result: Readily biodegradable. Biodegradation: 72 % Exposure time: 20 d

**13. DISPOSAL CONSIDERATIONS****WASTE TREATMENT METHODS****GENERAL INFORMATION :** No data available.**DISPOSAL METHOD:** Dispose of waste and residues in accordance with Local, State, and Federal Regulations. Mix with compatible chemical which is less flammable and incinerate. Since emptied containers retain product residue, follow label warnings even after container is emptied. Residual vapors may explode on ignition; do not cut, drill, grind or weld or near this container.**14. TRANSPORT INFORMATION****\*CHECK WITH YOUR CARRIER FOR ADDITIONAL RESTRICTIONS THAT MAY APPLY.****USDOT GROUND****DOT (DEPARTMENT OF TRANSPORTATION)****PROPER SHIPPING NAME (DOT) :** Paint**HAZARDS CLASS :** 3**UN/NA NUMBER :** UN1263**PACKING GROUP :** PG II**EMERGENCY RESPONSE GUIDE (ERG) :** 128**IATA (AIR)****DOT (INTERNATIONAL AIR TRANSPORTATION ASSOCIATION)****PROPER SHIPPING NAME :** Paint**HAZARDS CLASS :** 3**UN/NA NUMBER :** UN1263**PACKING GROUP :** PG II**EMERGENCY RESPONSE GUIDE (ERG) :** 128**IMDG (OCEAN)****PROPER SHIPPING NAME :** Paint**HAZARDS CLASS :** 3**UN/NA NUMBER :** UN1263**PACKING GROUP :** PG II**EMERGENCY RESPONSE GUIDE (ERG) :** 128**MARINE POLLUTANT :** No**SPECIAL PRECAUTIONS :** P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking. P235 Keep cool.**15. REGULATORY INFORMATION****US FEDERAL REGULATIONS****All ingredients in Section #3 are TSCA (Toxic Substance Control Act) listed.****OSHA HAZARDS :** Flammable liquid, Moderate skin irritant, Moderate eye irritant, Carcinogen.**EPCRA - Emergency****CERCLA REPORTABLE QUANTITY**

<b>This product contains:</b>	<b>Chemical CAS#</b>
n-Butyl Acetate	123-86-4
Xylene	1330-20-7
Phenylethane	100-41-4
Isobutyl Alcohol	78-83-1
Carbon Black	1333-86-4

**SARA 304 Extremely Hazardous Substances Reportable Quantity :** This material does not contain any components with a section 304 EHS RQ.**SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)****SARA 311/312 Hazards :** Fire Hazard, Acute Health Hazard, Chronic Health Hazard**SARA 313 :**

<b>This product contains:</b>	<b>Chemical CAS#</b>

Titanium Dioxide	13463-67-7
Acetic Acid, n-propyl ester	109-60-4
Methyl Amyl Ketone	110-43-0
Propyl Alcohol	71-23-8
n-Butyl Acetate	123-86-4
Amorphous Silica	7631-86-9
Xylene	1330-20-7
Phenylethane	100-41-4
Carbon Black	1333-86-4

**CLEAN AIR ACT :**

<b>This product contains:</b>	<b>Chemical CAS#</b>
Phenylethane	100-41-4
Meta-Xylene	108-38-3
Para-Xylene	106-42-3
O-Xylene	95-47-6

**INTERNATIONAL REGULATIONS**

**CLASSIFICATION ACCORDING TO REGULATION (EC) No. 1272/2008 (CLP) :**

Flam. Liq. Cat. 2; H226  
 Eye Irrit. Cat. 2; H319  
 STOT SE Cat. 3; H336

**NATIONAL REGULATIONS**

<b>This product contains:</b>	<b>Chemical CAS#</b>
#Titanium Dioxide	13463-67-7
#Phenylethane	100-41-4
#Carbon Black	1333-86-4

# Indicates a chemical listed by IARC as a possible carcinogen.

**STATE REGULATIONS  
 CALIFORNIA PROPOSITION 65**

<b>This product contains:</b>	<b>Chemical CAS#</b>
*Phenylethane	100-41-4
#2-Ethylhexanoic acid	149-57-5
*Crystalline Silica	14808-60-7
*Aliphatic Solvent	64742-47-8

\*This product contains (a) chemical (s) known to the State of California to cause cancer.  
 #This product contains (a) chemical (s) known to the State of California to be carcinogenic.  
 +This product contains (a) chemical (s) known to the State of California to cause birth defects or other reproductive harm.

**Massachusetts Right to Know**

<b>This product contains</b>	<b>Chemical CAS#</b>
Acetic Acid, n-propyl ester	109-60-4

Methyl Amyl Ketone	110-43-0
Propyl Alcohol	71-23-8
n-Butyl Acetate	123-86-4
Calcium Carbonate	1317-65-3
Barium Sulfate	7727-43-7
Xylene	1330-20-7
Diacetone Alcohol	123-42-2
Phenylethane	100-41-4
Isobutyl Alcohol	78-83-1
Carbon Black	1333-86-4
Butyl Alcohol	71-36-3
Aliphatic Solvent	64742-47-8
Para-Xylene	106-42-3
O-Xylene	95-47-6
Pseudocumene	95-63-6

### **Pennsylvania Right to Know**

<b>This product contains</b>	<b>Chemical CAS#</b>
Titanium Dioxide	13463-67-7
Acetic Acid, n-propyl ester	109-60-4
Methyl Amyl Ketone	110-43-0
Propyl Alcohol	71-23-8
n-Butyl Acetate	123-86-4
Calcium Carbonate	1317-65-3
Barium Sulfate	7727-43-7
Amorphous Silica	7631-86-9
Xylene	1330-20-7
Aluminum Hydroxide	21645-51-2
Diacetone Alcohol	123-42-2
Phenylethane	100-41-4
Isobutyl Alcohol	78-83-1
Carbon Black	1333-86-4
Methyl Ethyl Ketoxime	96-29-7
Butyl Alcohol	71-36-3
1,10-Phenanthroline	66-71-7
2-Ethylhexanoic acid	149-57-5
Aliphatic Solvent	64742-47-8
Para-Xylene	106-42-3
O-Xylene	95-47-6
Pseudocumene	95-63-6

### **New Jersey Right to Know**

<b>This product contains</b>	<b>Chemical CAS#</b>
Titanium Dioxide	13463-67-7
Acetic Acid, n-propyl ester	109-60-4
Methyl Amyl Ketone	110-43-0
Propyl Alcohol	71-23-8
n-Butyl Acetate	123-86-4
Calcium Carbonate	1317-65-3

Barium Sulfate	7727-43-7
Amorphous Silica	7631-86-9
Xylene	1330-20-7
Aluminum Hydroxide	21645-51-2
Diacetone Alcohol	123-42-2
Phenylethane	100-41-4
Isobutyl Alcohol	78-83-1
Carbon Black	1333-86-4
Methyl Ethyl Ketoxime	96-29-7
Butyl Alcohol	71-36-3
1,10-Phenanthroline	66-71-7
2-Ethylhexanoic acid	149-57-5
Aliphatic Solvent	64742-47-8
Para-Xylene	106-42-3
O-Xylene	95-47-6
Pseudocumene	95-63-6

**16. OTHER INFORMATION**

**Other Product Information**

% Volatile by Volume: 48.98  
 % Solids by volume: 51.02  
 % Exempt by Volume: 0.00

% Volatile by Weight: 30.45  
 % Solids by Weight: 69.55  
 % Exempt by Weight: 0.00

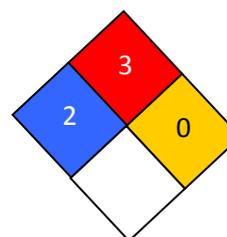
**VOC CONTENT:**

Excluding Exempt VOC: 420  
 Including Exempt VOC: 420

**HMIS RATING**

Health :	2*
Flammability :	3
Reactivity :	0
Personal Protection :	H

**NFPA CODES**



**MANUFACTURER DISCLAIMER :** The information contained in this Safety Data Sheet is considered to be true and accurate. Cardinal Industrial Finishes makes no warranties, expressed or implied, as to the accuracy and adequacy of this information. This data is offered solely for the user's consideration, investigation and verification.