

SAFETY DATA SHEET



DATE ISSUED :	6/4/2015
SDS REF. No :	6G00 SERIES

6G00 SERIES REGLAZING POLYURETHANE

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 6G00 SERIES REGLAZING POLYURETHANE
PRODUCT CODE: 6G00 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 Transportation) : 1(202)483-7616
WEB: WWW.CARDINALPAINT.COM

2. HAZARDS IDENTIFICATION

PICTOGRAMS



SIGNAL WORD : DANGER

HAZARD STATEMENTS : H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

PRECAUTIONARY STATEMENTS : 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.
P233 Keep container tightly closed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Weight %	CAS Number	
Acetone	15% - 20%	67-64-1	
Parachlorobenzotrifluoride	5% - 10%	98-56-6	

P.M. Acetate	1% - 5%	108-65-6	
Amorphous Silica	1% - 5%	7631-86-9	
Crystalline Silica	0.10% - 0.50%	14808-60-7	

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 and 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, CO₂, water fog. Unsuitable extinguishing media: Do not use heavy water stream. A heavy water stream my spread brning 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

Acetone(67-64-1)		
USA ACGIH	ACGIH STEL TLV	750 ppm
USA ACGIH	ACGIH TWA TLV	500 ppm
USA NIOSH	NIOSH STEL (Table Z-1)	1,000 ppm, 2,400 mg/m3
USA NIOSH	NIOSH TWA	250 ppm, 590 mg/m3
USA OSHA	OSHA TWA (Table Z-1)	1,000 ppm, 2,400 mg,m3
Carbon Black(1333-86-4)		
USA ACGIH	ACGIH TLV (mg/m3)	3.0 mg/m3
USA OSHA	OSHA PEL (mg/m3)	3.5 mg/m3
Crystalline Silica(14808-60-7)		
USA ACGIH	ACGIH (TLV) TWA	.025 mg/m3
Formaldehyde(50-00-0)		
USA ACGIH	ACGIH (TLV)	0.3 ppm
USA OSHA	OSHA (PEL) STEL	2 ppm
USA OSHA	OSHA (PEL) STEL	2 ppm STEL 15 min
USA OSHA	OSHA (PEL) TWA	0.75 ppm
P.M. Acetate(108-65-6)		
USA AIHA	AIAH (WEEL) TWA	50 ppm
Parachlorobenzotrifluoride(98-56-6)		
USA ACGIH	USA ACGIH	Conatins no substances with exposure limit values.
Styrene(100-42-5)		
USA ACGIH	ACGIH STEL (ppm)	40 ppm
USA ACGIH	ACGIH TWA (ppm)	20 ppm
USA OSHA	OSHA TWA (ppm)	100 ppm
Titanium Dioxide(13463-67-7)		
PEL (Permissible Exposure Limit)	OSHA TWA	15 mg/m3
TLV	ACGIH TWA	10 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

Physical state	:	Liquid
Color	:	Various colors depending on the pigmentation.
Odor	:	Chartistic. Sweet. Mint like.
Odor threshold	:	No data available.
Ph	:	N/A – See Technical Data Sheet
Evaporation rate	:	Slower Than Ether
Melting point	:	-94.7 C (-138.46 F)
Freezing point	:	No data available.
Boiling point	:	-3.0 deg F TO 302.0 deg F
Flash point	:	-4.00 deg F
Lower explosion limit	:	.9
Upper explosion limit	:	13.1
Vapour pressure	:	185 mm Hg
Vapour density	:	Heavier than air
Relative density	:	No data available.
Density	:	12.9370
Solubility	:	No data available.
Partion coefficient: n-octanol/water	:	No data available.
Autoignition temperature	:	No data available.
Decomposition temperature	:	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 (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

11. TOXICOLOGICAL INFORMATION

Acetone(67-64-1)	
Aspiration toxicity	Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above TLV value may cause nercotic effects., Solvents may degrease the skin.
Carcinogenicity	Species: mouse, (female), Application Route: Dermal; Exposure time: .365 d (90%) or 424 d (100%), Dose: 0.1ml 90(71mg) or 100% (79mg), Frequency of Treatment: 3 times a wk, NOAEL: 79; Result: dod not display carcinogenic properties., Carcinogenicity-Assessment: Not classified as a human carcinogen.

Germ cell mutagenicity	Test Type: mammalian cell gene mutation assay. Test species: Mouse Iymphorma, Metabolic activation: Without metabolic activation; Method: OECD Guideline 476; Result: negative; Test Type: Ames test, Metabolic activation: Without metabolic activation; Method: OECD Guideline 471; Result: negative, Test Type: Chromosome aberration test in vitro, Test species: Chinese hamster ovary (CHO), Metabolic activation: Without metabolic activation; Method: OECD Guideline 473; Result: negative; Genotoxicity in vivo: Test Type: I vivo micronucleus test. Test species: Mouse, Application Route: Oral, Exposure: 13 wk, Dose: 5,000, 10,000, 20,000 ppm, Result: negative
Germ cell mutagenicity Assessment	Animal testing did not show any mutagenic effects.
LC50 (rat) Inhalation	76 mg/l (4 h exposure)
LD50 (rat) Oral	5,800 mg/kg; Symptoms: tremors
LD50 Dermal	>7,426 mg/kg
Repeated dose exposure	Species: mouse, male, NOAEL: 20,000, Application Route: Oral, Exposure time: 13 wk, Number of exposures: daily, Dose: 1250, 2500, 5000, 10000, 20000, Method OECD Test Guideline 408, GLP: No data available.; Species: mouse, female, NOAEL 20000, LAOEL: 50000; Application Route: Oral, Exposure time: 13 wk, Number of exposures: daily, Dose: 1250, 2500, 5000, 10000, 20000, Method OECD Test Guideline 408, GLP: No data available; Repeated dose toxicity Assessment: causes mild skin irritation., Causes serious eye irritation.
Reproductive toxicity	Effects on fertility: Species: rat, male; Application Route: oral; Dose: 0, 5,000, 10,000 mg/l; Frequency of Treatment: 7 days/week; General Toxicity - Parent: LOAEL: 10,000; Fertility: 10,000; Effects on foetal development: Species: rat; Application Route: Inhalation; Dose: 0, 440, 2200, 11,000 ppm; Frequency of Treatment: 7 days/week; General Toxicity Material: NOAEC: 2,200 ppm; Tetragenicity: NOAEC: 2,200 ppm; Embryo-foetal toxicity:: NOAEC: 2,200 ppm; Result: No teratogenic potential. GLP: No data available.; Reproductive toxicity Assessment: Did not show teratogenic effects in animal experiments.
Respiratory or skin sensitization	Test type: Maximization test, Species: guinea pig, Assessment: Does not cause skin sensitization. Result: Did not cause sensitization on laboratory animals.
Serious eye damage/eye irritation	Species: rabbit, Result : Slightly irritating to eyes, Exposure time: 24 h, Classification: Irritating to eyes, Remarks: Eye irritation.
Skin corrsion/irritation	Species: rabbit, Exposure time: 24 h, Classification: Not irritating to skin, Method: In vivo, Result: Mild irritation, Remarks: Repeated or prolonged contact with the mixture may cause removal natural fat from the skin resulting in desiccation of the skin.
STOT - single exposure	Exposure routes: Inhalation (vapour); Assessment: May cause drowsiness or dizziness.
STOT- repeated exposure	No data available.
Amorphous Silica(7631-86-9)	
Additional toxicological information	The product is not subject to classification according ot internally approved calculation methods for preparations: When used and handled according tp specifications, the product does not have any harmful effects according to our experience and information provided to us.
Irritant of skin	Not irritating (rabbit) (OCED 404)
Irritant of eyes	Not irritating (rabbit) (OCED 405)
LC0 - Inhalative	>140->2000 mg/m3 / 4 h (Rat) (OCED 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) (OCED 406)
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) .I
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 hprt 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/m ³ 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 foetus under in vivo conditions. Therefore, no adverse effects of carbon black to fertility/reproduction or to foetal 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
Crystalline Silica(14808-60-7)	
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.
Formaldehyde(50-00-0)	
Genotoxicity	Formaldehyde was found to be weakly mutagenic in a number of in vitro genotoxicity tests and positive in certain in vivo screening tests for mutagenicity. Formaldehyde did not cause birth defects in rats inhaling concentrations up to 10 ppm. However, a study using higher levels did show a slight but statistically significant reduction in male fetal body weight.
LD50 Dermal - Rabbit	270 mg/kg
LD50 Inhalation - Rat	0.31-0.59 mg/l (4 h) (Dust/ Mist)
LD50 Oral - Rat - Acute toxicity	100 mg/kg, Rat
Other Information	Lifetime inhalation of formaldehyde vapor at concentrations above 5 ppm for 6 hours per day, caused nasal tumors in laboratory animals. The International Agency for Research on Cancer (IARC) has classified formaldehyde as a Group 1 (known) human carcinogen based on epidemiological evidence linking formaldehyde exposure to the occurrence of nasopharyngeal cancer, a rare type of cancer. IARC also found limited evidence of cancer of the nasal cavity and paranasal sinuses and insufficient evidence for an association between formaldehyde and leukemia. Inhalation caused liver and kidney damage in laboratory animal tests.
Sensitization	Formaldehyde has been reported to cause pulmonary hypersensitivity in some individuals who were exposed to concentrations known to cause irritation, however, no pulmonary sensitization has been demonstrated in laboratory animal studies.
Skin/Eye irritation	Can cause severe eye and moderate skin irritation.
Specific Target Organ Toxicity	Repeated skin exposure to solutions of 2% or more formaldehyde has caused skin allergic

- Repeated exposure	reactions.
Specific Target Organ Toxicity - Single	No data.
P.M. Acetate(108-65-6)	
Aspiration hazard	No data available.
Carcinogenicity	No data available.
LC50 - Inhalation Rat	>4345 ppm (Rat, 6 h)
LD50 - Dermal - Rabbit	>5000 mg/kg
LD50 - Oral - Rat	6,190 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): very slight
Skin corrosion/irritation	Specified substance(s) 2-methoxy-1-methylethyl acetate (Rabbit, 4 h): none (Rabbit, 24 h): none.
Specific target organ toxicity - repeated exposure	No data available.
Specific target organ toxicity - single exposure	No data available.
Parachlorobenzotrifluoride(98-56-6)	
Additional Information	RTECS: XS9145000 To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
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 Embryo Unscheduled DNA synthesis.
LD50 Oral - Rat	13,000 mg/kg Dermal: 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	No data available.
Specific target organ toxicity - single exposure	Inhalation - May cause respiratory irritation.
Styrene(100-42-5)	
Irritation / corrosion - Eye	Species: Rabbit; Result: non-irritant; Method: BASF - Test
Irritation / corrosion - Sensitization	Species: Guinea pig; Result: non-sensitization; Method: OECD Guideline 406.
Irritation / corrosion - Skin	Species: Rabbit; Result: non-irritant; Method: BASF - Test
LC50 Dermal - Rat	Not determined
LC50 Inhalation - Rat	Exposure time 4 h ; not determined
LD50 Oral - Rat	>5,000 mg/kg
Titanium Dioxide(13463-67-7)	
Carcinogenicity	In lifetime inhalation studies rats were exposed for 2 years to respectively 10, 50, 250 mg/m3 of respirable TiO2.
Dermal ALD (rabbit)	>10000 mg/m3
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

12. ECOLOGICAL INFORMATION

Acetone(67-64-1)	
Bioaccumulative potential	Partition coefficient: n-octanol/water: log Pow: -0.24
EC50 (Daphnia magna (Water flea))	7,630 mg/l (Exposure time 48 h); Test substance: Acetone
LC50 (Oncorhynchus mykiss (rainbow trout))	6,100 mg/l (Exposure time: 48 h)
Mobility in soil	No data available.
Other adverse effects	No data Available. Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratspheric Ozone - CAA Section 602 Class I Substances., Additional ecological information: No data available.
Persistence and degradability	Biodegradability: Remarks: No data available
Toxicity to algae	Remarks: No data available
Amorphous Silica(7631-86-9)	
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 (Scenedesmus subspicatus) (72 h) (OCED 201) comparable substance
EC50 - Daphnia magna	>1000 mg/l (Daphnia magna) (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 seperstion at evrty filtration and sedimentation process.
Carbon Black(1333-86-4)	
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 (Scenedesmus subspicatus)	> 10,000 mg/L, OECD (Guideline 201)
EC50 Daphnia magna (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 Brachydanio reio (zebrafish)	>1000 mg/l (96 h) OECD (Guideline 203)
NOEC 50 (Scenedesmus subspicatus)	> 10,000 mg/L, OECD (Guideline 201)
Crystalline Silica(14808-60-7)	
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 assesment	PBT/vPvB assesment not available as chemical safety assesment not required/not conducted
Toxicity	No data available.
Formaldehyde(50-00-0)	
EC50 Daphnia - Toxicity to Water Flea	11.3-18 mg/l (48 h), Daphnia magna
LC50 Oncorhynchus - Toxicity to fish	100-136 mg/l, (96 h), Oncorhynchus mykiss
Toxicity to Algae	Not available.
P.M. Acetate(108-65-6)	
Aquatic invertebrates	NOEC (daphnia, 21 d): >= 100 mg/l EC-50 (daphnia, 21 d): > 100 mg/l
Bioaccumulative potential	No data available.
Biological Oxygen Demand	363 mg/g 1,050 mg/g
Chemical Oxygen Demand	No data available.
Chronic Toxicity Fish	LC-50 (Oryzias latipes, 14 d): 63.5 mg/l NOEC (Oryzias latipes, 14 d): 47.5 mg/l
LC50 - Daphnoid - Aquatic	408 mg/l (48 h)

invertebrates	
LC50 - Fathead Minnow - Toxicity to Fish	161 mg/l (96 h)
Mobility in soil	No data available.
Other adverse effects	No data available.
Persistence and degradability	Biodegradation - 90 % (28 d, Ready Biodegradability: CO2 Evolution Test) Readily biodegradable
Results of PBT and vPvB assessment	No data available.
Toxicity to Aquatic Plants	EC-50 (Selenastrum capricornutum, 96 h): > 1,000 mg/l NOEC (Selenastrum capricornutum, 96 h): >= 1,000 mg/l
Parachlorobenzotrifluoride(98-56-6)	
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.
Styrene(100-42-5)	
Bioaccumulation	At present state of knowledge, no negative ecological effects are expected.
Chronic	No data available regarding toxicity to Daphnoids.
Chronic	No data available regarding toxicity to fish.
EC50 (Algae)	(72 h); No data available concerning toxicity for algae.
EC50 (Daphnia) Acute	(48 h) No data available regarding toxicity to daphnia.
LC50 Fish (Leuciscus idus) Acute	>100 mg/l (96 h)
Microorganisms	Toxicity to microorganisms: The inhibition of the degradation activity sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.
Titanium Dioxide(13463-67-7)	
LC50 fish	Fathead minnow 96 h >1000 mg/l

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

USDOT GROUND

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME (DOT) : Paint, flammable liquid

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, flammable liquid

HAZARDS CLASS : 3

UN/NA NUMBER : UN1263

PACKING GROUP : PG II

EMERGENCY RESPONSE GUIDE (ERG) : 128

IMDG (OCEAN)

PROPER SHIPPING NAME : Paint, flammable liquid

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, Fire hazard, Chronic health hazard, Moderate skin irritant, Moderate eye irritant, Carcinogen.

EPCRA - Emergency

CERCLA REPORTABLE QUANTITY

Methyl Ethyl Ketone (CAS# 78-93-3) : RQ(lbs) 5000

Carbon Black (CAS# 1333-86-4) : RQ (lbs) 5000

Isobutanol (CAS# 78-83-1) : RQ 5000

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 :

Not reportable.

CLEAN AIR ACT :

This product contains:	Chemical CAS#
Styrene	100-42-5
Formaldehyde	50-00-0

INTERNATIONAL REGULATIONS

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

Flam. Liq. 2 H226

Eye Irrit. 2 H319

STOT SE 3 H336

NATIONAL REGULATIONS

This product contains:	Chemical CAS#
#Titanium Dioxide	13463-67-7
"Crystalline Silica	14808-60-7
#Carbon Black	1333-86-4

Indicates a chemical listed by IARC as a possible carcinogen.

STATE REGULATIONS

CALIFORNIA PROPOSITION 65

This product contains:	Chemical CAS#
*Crystalline Silica	14808-60-7

*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 cause birth defects or other reproductive harm.

Massachusetts Right to Know

Carbon Black CAS# 1333-86-4
 Methyl Ethyl Ketone CAS# 78-93-3
 Parachlorobenzotrifluoride CAS# 98-56-6
 Silica Gel CAS# 112926-00-8
 Cyclohexanone CAS# 108-94-1
 Isobutanol CAS# 78-83-1
 Hydrous Magnesium Silicate CAS# 14807-96-6
 Quartz CAS# 14808-60-7
 Trade Secret: 489909-5260-P-CH

Pennsylvania Right to Know

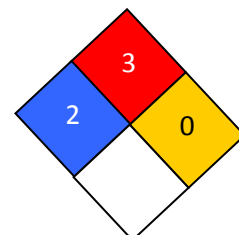
Carbon Black CAS# 1333-86-4
 Titanium Dioxide CAS# 13463-67-7
 Aluminum Hydroxide CAS# 21645-51-2
 Amorphous Silicon Dioxide CAS# 7631-86-9
 Methyl Amyl Ketone CAS# 100-43-0
 Methyl Ethyl Ketone CAS# 78-93-3
 Pyrogenic Colloidal Silica CAS# 112945-52-5
 Parachlorobenzotrifluoride CAS# 98-56-6
 Silica Gel CAS# 112926-00-8
 Cyclohexanone CAS# 108-94-1
 Isobutanol CAS# 78-83-1
 PM Acetate CAS# 108-65-6
 Trade Secret: 48909-5260-P-H
 Ethene homopolymer CAS# 9002-88-4
 Quartz CAS# 1408-60-7
 Magnesium Carbonate CAS# 546-93-0
 Cyclohex-1,4-ylenedimethanol CAS# 105-08-8
 1,3-Bis(hydroxymethyl)cyclohexane CAS# 3971-28-6

New Jersey Right to Know

Carbon Black CAS# 1333-86-4
 Titanium Dioxide CAS# 13463-67-7
 Aluminum Hydroxide CAS# 21645-51-2
 Amorphous Silicon Dioxide CAS# 7631-86-9
 Methyl Amyl Ketone CAS# 100-43-0
 Methyl Ethyl Ketone CAS# 78-93-3
 Pyrogenic Colloidal Silica CAS# 112945-52-5
 Parachlorobenzotrifluoride CAS# 98-56-6
 Silica Gel CAS# 112926-00-8
 Cyclohexanone CAS# 108-94-1
 Isobutanol CAS# 78-83-1
 PM Acetate CAS# 108-65-6
 Trade Secret: 48909-5260-P-H
 Ethene homopolymer CAS# 9002-88-4
 Quartz CAS# 1408-60-7
 Magnesium Carbonate CAS# 546-93-0
 Cyclohex-1,4-ylenedimethanol CAS# 105-08-8
 1,3-Bis(hydroxymethyl)cyclohexane CAS# 3971-28-6

16. OTHER INFORMATION**HMIS RATING**

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

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.