

SAFETY DATA SHEET



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| DATE ISSUED : | 5/14/2016 |
| SDS REF. No : | 6S00 SERIES |

6S00 SERIES ACRYLIC POLYURETHANE

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 6S00 SERIES ACRYLIC POLYURETHANE

PRODUCT CODE: 6S00

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 :

P233 Keep container tightly closed.

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 | |
|----------------------------|-----------|------------|--|
| Acetone | 10% - 15% | 67-64-1 | |
| Parachlorobenzotrifluoride | 5% - 10% | 98-56-6 | |

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|--------------------|---------|----------|--|
| Methyl Amyl Ketone | 1% - 5% | 110-43-0 | |
|--------------------|---------|----------|--|

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

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

| 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 |
| Aluminum Hydroxide(21645-51-2) | | |
| USA ACGIH | ACGIH (TLV) TWA | 10 mg/m3 (Total dust), 3 mg/m3 (Respirable fraction) |
| USA OSHA | OSHA (PEL) TWA | 15 mg/m3 (Tptal dust), 5 mg/m3 (Respirable fraction) |
| 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 |
| Dibutyltin Dilaurate(77-58-7) | | |
| USA ACGIH | ACGIH STEL | 0.2 mg/m3 |
| USA ACGIH | ACGIH TWA | 0.1 mg/m3 |
| USA NIOSH | NIOSH REL | 0.1 mg/m3 |
| USA OSHA | OSHA PEL (Table Z-1) | 0.1 mg/m3 |
| USA OSHA | OSHA TWA (Table Z-1A) | 0.1 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 |
| 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 |
| Parachlorobenzotrifluoride(98-56-6) | | |
| USA ACGIH | USA ACGIH | Contains 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

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| Physical state | : | Liquid |
| Color | : | Various colors depending on the pigmentation. |
| Odor | : | Characteristic. 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 | : | 133.0 deg F TO 305.0 deg F |
| Flash point | : | -4.00 deg F |
| Lower explosion limit | : | .9 |
| Upper explosion limit | : | 12.8 |
| Vapor pressure | : | 185 mm Hg |
| Vapor density | : | Heavier than air |
| Relative density | : | No data available. |
| Density | : | 12.6305 |
| 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

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| 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 narcotic 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: did 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 Lymphoma, 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, |

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| | Number of exposures: daily, Dose: 1250, 2500, 5000, 10000, 20000, Method OECD Test Guideline 408, GLP: No data available.; Species: mouse, female, NAOEL 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 fetal 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-fetal 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 sensitisation | 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 corrosion/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 (vapor); Assessment: May cause drowsiness or dizziness. |
| STOT- repeated exposure | No data available. |
| Aluminum Hydroxide(21645-51-2) | |
| 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. |
| Amorphous Silica(7631-86-9) | |
| 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) (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 |

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| | <p>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.</p> |
| Human Epidemiology - cont | <p>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).</p> |
| Human Epidemiology - cont. | <p>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.</p> |
| Human Epidemiology -cont. | <p>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) .l</p> |
| IARC | <p>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).</p> |
| LD50 (Rat) | >8000 mg/kg |
| Mutagenic Effects and Germ Cell Mutagenicity | <p>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.</p> |
| NIOSH | <p>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.</p> |
| NTP | <p>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).</p> |
| Reproductive and Teratogenic Effects | <p>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</p> |

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| | 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 |
| Dibutyltin Dilaurate(77-58-7) | |
| Chronic Health Hazard | Dibutyltin compounds have shown reproductive and immunotoxic effects in laboratory animals. Abnormalities noted at necropsy of animals treated with 2000 mg/kg of dibutyltin dilaurate were hemorrhagic lungs, dark liver, dark kidneys, hemorrhage of gastric mucosa, hemorrhage of the large and small intestines, enlarged bile duct and behavioral and central nervous system effects. Decreased fertility was seen in hens following dietary administration equal to 78 mg/kg. |
| Eye irritation/corrosion | Severe eye irritation. |
| Inhalation | No data is available on the product itself. |
| LD50 - Rabbit (Dermal) | > 2,000 mg/kg, Method : Estimated. |
| LD50 - Rat (Ingestion) | > 2,000 mg/kg |
| Skin irritation/corrosion | Severe skin irritation. Corrosive to the skin of a rabbit. |
| Methyl Amyl Ketone(110-43-0) | |
| 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. |
| n-Butyl Acetate(123-86-4) | |
| 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 toxicity - single exposure | Narcotic effect. |
| 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 |

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| | 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

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| 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 Stratospheric 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 |
| Aluminum Hydroxide(21645-51-2) | |
| 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 degradability | Non-degradable |
| 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 separation at every filtration and sedimentation process. |
| Carbon Black(1333-86-4) | |

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|--|--|
| 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) |
| Dibutyltin Dilaurate(77-58-7) | |
| Aquatic toxicity | No data is available on the product itself. |
| Bioaccumulation | No data is available on the product itself. |
| EC50 - Daphnia | 2.28 mg/l, Species : Daphnia magna. |
| LC50 - Fish | 2 mg/l, Species : Fish. |
| Mobility | No data available. |
| Persistence and degradability | Biodegradability : No data is available on the product itself. |
| Toxicity to other organisms | No data available. |
| Methyl Amyl Ketone(110-43-0) | |
| Aquatic invertebrates | No data available. |
| Bioaccumulative potential | No data available. |
| Chronic Toxicity (Fish) | No data available. |
| ErC50 (Senastrum 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. |
| n-Butyl Acetate(123-86-4) | |
| 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. |
| 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 daphnids. |
| 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) |

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|------------------------------|--|
| 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 incenerate. 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

| This product contains: | Chemical CAS# |
|------------------------|---------------|
| n-Butyl Acetate | 123-86-4 |
| 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 :

| This product contains: | Chemical CAS# |
|-------------------------------|----------------------|
| Titanium Dioxide | 13463-67-7 |
| Acetone | 67-64-1 |
| Parachlorobenzotrifluoride | 98-56-6 |
| Methyl Amyl Ketone | 110-43-0 |
| Amorphous Silica | 7631-86-9 |
| Amorphous Silica | 7631-86-9 |
| Carbon Black | 1333-86-4 |

CLEAN AIR ACT :

| This product contains: | Chemical CAS# |
|-------------------------------|----------------------|
| Styrene | 100-42-5 |

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

| This product contains: | Chemical CAS# |
|-------------------------------|----------------------|
| #Titanium Dioxide | 13463-67-7 |
| #Carbon Black | 1333-86-4 |

Indicates a chemical listed by IARC as a possible carcinogen.

**STATE REGULATIONS
 CALIFORNIA PROPOSITION 65**

*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

| This product contains | Chemical CAS# |
|------------------------------|----------------------|
| Acetone | 67-64-1 |
| Parachlorobenzotrifluoride | 98-56-6 |
| Methyl Amyl Ketone | 110-43-0 |
| n-Butyl Acetate | 123-86-4 |
| Acetylacetone | 123-54-6 |
| Carbon Black | 1333-86-4 |

Pennsylvania Right to Know

| This product contains | Chemical CAS# |
|------------------------------|----------------------|
| Titanium Dioxide | 13463-67-7 |
| Acetone | 67-64-1 |
| Parachlorobenzotrifluoride | 98-56-6 |
| Methyl Amyl Ketone | 110-43-0 |

| | |
|----------------------|------------|
| Amorphous Silica | 7631-86-9 |
| Aluminum Hydroxide | 21645-51-2 |
| n-Butyl Acetate | 123-86-4 |
| Acetylacetone | 123-54-6 |
| Carbon Black | 1333-86-4 |
| Dibutyltin Dilaurate | 77-58-7 |

New Jersey Right to Know

| This product contains | Chemical CAS# |
|----------------------------|---------------|
| Titanium Dioxide | 13463-67-7 |
| Acetone | 67-64-1 |
| Parachlorobenzotrifluoride | 98-56-6 |
| Methyl Amyl Ketone | 110-43-0 |
| Amorphous Silica | 7631-86-9 |
| Aluminum Hydroxide | 21645-51-2 |
| n-Butyl Acetate | 123-86-4 |
| Acetylacetone | 123-54-6 |
| Carbon Black | 1333-86-4 |
| Dibutyltin Dilaurate | 77-58-7 |

16. OTHER INFORMATION

Other Product Information

% Volatile by Volume: 44.53

% Solids by volume: 55.47

% Exempt by Volume: 35.47

% Volatile by Weight: 26.87

% Solids by Weight: 73.13

% Exempt by Weight: 21.95

VOC CONTENT:

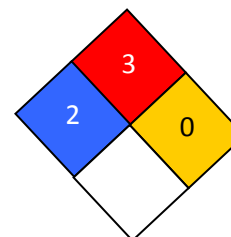
Excluding Exempt VOC: 115

Including Exempt VOC: 74

HMIS RATING

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

NFPA CODES



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