

C356-GR1342 SILVER B**1. PRODUCT AND COMPANY IDENTIFICATION**

PRODUCT NAME: C356-GR1342 SILVER B
PRODUCT USE: Industrial Powder Coating

MANUFACTURER

Cardinal Paint and Powder
1329 Potrero Ave
S. El Monte, CA, 91733
626 444-9274

24 HR. EMERGENCY TELEPHONE NUMBER

CHEMTREC (US Transportation): (800)424-9300
CHEMTREC (International Transportation): (202)483-7616
WEB: WWW.CARDINALPAINT.COM

2. HAZARDS IDENTIFICATION**PICTOGRAMS :**

SIGNAL WORD : WARNING

HAZARD STATEMENTS :

H351 Suspected of causing cancer.
H372 Causes damage to organs through prolonged or repeated exposure.

PRECAUTIONARY STATEMENTS :

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Weight %	CAS Number
Aluminum	1% - 5%	7429-90-5
1,3,5-Triglycidyl Isocyanurate	1% - 5%	2451-62-9
Titanium Dioxide	0.50% - 0.99%	13463-67-7

4. FIRST AID MEASURES**Description of first aid measures.**

EYE CONTACT : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

SKIN CONTACT : Remove affected clothing and wash all exposed area with mild soap and water, followed by warm water rinse. Wash with plenty of soap and water. If skin irritation or rash occurs: Wash with plenty of soap and water. Get medical advice/attention. Wash contaminated clothing before reuse. Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages.



INGESTION : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a Poison Center or doctor/physician if you feel unwell.

INHALATION : Allow victim to breathe fresh air. Allow victim to rest. Remove to fresh air and keep at rest in a position comfortable to breath. Call a Poison Center or doctor/physician if you feel unwell.

Most important symptoms and effect, both acute and delayed : Symptoms/Injuries: May cause genetic defects. Causes damage to organs. - After Inhalation: Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled. May cause an allergic skin reaction. May cause cancer by inhalation. - After Eye Contact: Causes serious eye damage. - After Ingestion: Swallowing a small quantity of this material may result in serious health hazard. Indication of any immediate medical attention and special treatment needed: No additional information available.

5. FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Foam, alcohol foam, dry chemical, carbon dioxide, water fog or sand.

UNSUITABLE EXTINGUISHING MEDIA: Do not use heavy water stream.

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: This product is stable at normal handling and storage conditions.

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 : Protective equipment : Equip cleanup crew with proper protection. - Emergency procedures : Ventilate area.

ENVIRONMENTAL PRECAUTIONS : Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public water. Avoid release to the environment.

METHODS AND MATERIAL FOR CONTAINMENT AND CLEAN UP : On land, sweep or shovel into suitable containers,. Minimize generation of dust.

7. HANDLING AND STORAGE

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. Use only in well ventilated areas. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Eliminate all ignition sources if safe to do so. Avoid breathing dust, fumes and/or vapors.

Hygiene measures: Wash Skin thoroughly after handling.

CONDITIONS FOR SAFE STORAGE, INCLUDING INCOMPATIBILITIES : Avoid heat sources and direct sunlight. Store in a dry place. Protect from moisture. Keep container closed when not in use. Keep only in the original container in a cool well ventilated place away from heat, ignition sources and direct sunlight.

Incompatible products: Strong bases. Strong acids.

Incompatible materials: Source of ignition. Direct sunlight.

**8. EXPOSURE CONTROLS\PERSONAL PROTECTION**

1,3,5-Triglycidyl Isocyanurate(2451-62-9)		
ACGIH TLV (Threshold Limit Value)	TWA (Time Weighted Average)	0.05 mg/m ³ 8 hours
2-Mercaptobenzothiazole(149-30-4)		
USA WEEL	(WEEL) TWA	5 mg/m ³
Aluminum Oxide(1344-28-1)		
USA OSHA	(OEL) Table Z-1, TWA	15 mg/m ³
USA ACGIH	(TLV) TWA	1 mg/m ³
Aluminum(7429-90-5)		
ACGIH TLV (Threshold Limit Value)	TWA (Time Weighted Average)	1 mg/m ³ 8 hours
OSHA PEL (Permissible Exposure Limit)	TWA (Time Weighted Average)	5 mg/m ³ (Respirable Fraction) 8 hours
NIOSH REL (Recommended Exposure Limit)	TWA (Time Weighted Average)	5 mg/m ³ (Respirable Fraction) 10 hours
Amorphous Silica(112926-00-8)		
USA OSHA	USA OSHA TWA (Table Z-1)	6 mg/m ³
USA OSHA	USA OSHA TWA (Table Z-3)	20 Million particals per cubic foot.
USA NIOSH	USA NIOSH TWA (REL)	6 mg/m ³
Diethanolamine(111-42-2)		
ACGIH TLV (Threshold Limit Value)	TWA (Time Weighted Average)	1.0 mg/m ³ 8 hours
NIOSH REL (Recommended Exposure Limit)	TWA (Time Weighted Average)	15 mg/m ³ 8 hours
NIOSH REL (Recommended Exposure Limit)	TWA (Time Weighted Average)	3 ppm 8 hours
Ethylenediamine(107-15-3)		
USA ACGIH	USA ACGIH TWA (TLV)	10 ppm
USA OSHA	USA OSHA TWA (OEL)	10 ppm, 25 mg/m ³
USA NIOSH	USA NIOSH TWA (REL)	10 ppm, 25 mg/m ³
Titanium Dioxide(13463-67-7)		
ACGIH TLV (Threshold Limit Value)	TWA (Time Weighted Average)	10 mg/m ³ 8 hours
OSHA PEL (Permissible Exposure Limit)	TWA (Time Weighted Average)	15 mg/m ³ 8 hours

PERSONAL PROTECTIVE EQUIPMENT**RESPIRATORY PROTECTION :** Wear approved dust mask.**HAND PROTECTION :** Wear protective gloves.**EYE PROTECTION :** Chemical goggles or safety glasses.**SKIN AND BODY PROTECTION :** Wear suitable protective clothing.**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	:	Solid
Melting point	:	55 - 90 deg C
Flash point	:	No data available.
Lower explosion limit	:	10 g/m ³
Upper explosion limit	:	70 g/m ³
Density	:	1.2350
Solubility	:	No data available.
Autoignition temperature	:	No data available.
Decomposition temperature	:	No data available.

**10. STABILITY AND REACTIVITY****REACTIVITY :** This product is stable at normal handling and storage conditions.**CHEMICAL STABILITY :** Stable under normal conditions.**CONDITIONS TO AVOID :** Direct sunlight. Extremely high or low temperatures.**INCOMPATIBLE MATERIALS :** Strong acids. Strong bases.**HAZARDOUS DECOMPOSITION PRODUCTS:** Fume. Carbon monoxide. Carbon dioxide.**11. TOXICOLOGICAL INFORMATION**

1,3,5-Triglycidyl Isocyanurate(2451-62-9)	
Acute toxicity - LD50 - oral - rat	100 - 200 mg/kg
Acute toxicity - LC50 - inhalation - rat - male - 4 h	> 650 mg/m3
Acute toxicity - LD50 - Dermal - rat- male & female	> 2000 mg/kg
Skin irritation - rabbit	Mild skin irritation - 24 hours
Eye irritation - rabbit	Severe eye irritation
Respiratory or skin sensation - Maximization test - guinea pig	May cause sensitization by skin contact
Germ cell mutagenicity	In vivo tests showed mutagenic effects
Germ cell mutagenicity - AMES test - S. typhimurium	Positive
Germ cell mutagenicity - AMES test - mouse - male	Positive
IARC	No component of this product present at levels greater than or equal to 0.1% is identified as a 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
Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	No data available
Specific target organ toxicity - repeated exposure	No data available
Aspiration hazard	No data available
Additional information	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated
2-Mercaptobenzothiazole(149-30-4)	
Acute toxicity - LD50 - oral - male and femal rat	3800 mg/kg
Acute toxicity - LC50 - inhalation - rat	> 1270 mg/m3
Acute toxicity - LD50 - dermal - male and female rabbit	> 7940 mg/kg
Skin irritation - rabbit	No skin irritation / 24 h
Eye irritation - rabbit	No eye irritation / 24 h
Respiratory or skin sensitisation - Buehler test - guinea pig	May cause allergic skin reaction
Respiratory or skin sensitisation - Maximisation test - guinea pig	May cause allergic skin reaction
Germ cell mutagenicity - Ames test - S. typhimurium	Negative
Germ cell mutagenicity - male and female mouse	Negative
IARC	No component of this product present at levels greater than or equal to 0.1% is identified as a 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
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
Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	No data available
Specific target organ toxicity - repeated exposure	No data available
Aspiration hazard	No data available
Additional information	Repeated dose toxicity - male and female rat - lowest observed adverse effect level - 2500 mg/kg
Additional information	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated
Aluminum Oxide(1344-28-1)	
Acute toxicity - LD50 - oral - rat	> 10,000 mg/kg
Acute toxicity - LC50 - inhalation - rat	> 2.6 mg/L / 4 h
Acute toxicity - dermal	No data available
Skin irritation - rabbit	No skin irritation
Eye irritation - rabbit	No eye irritation
Respiratory or skin sensitisation - maximisation test - guinea pig	Did not cause sensitisation on laboratory animals
Germ cell mutagenicity	No data available
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	No component of this product present at levels greater than or equal to 0.1% is identified as a 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
Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	No data available
Specific target organ toxicity - repeated exposure	No data available
Aspiration hazard	No data available
Additional information	Cough, chest pain, difficulty in breathing, gastrointestinal disturbance
Additional information	Liver irregularities based on human evidence
Aluminum(7429-90-5)	
Likely routes of exposure - inhalation	Not available
Likely route of exposure - skin contact	No adverse effects due to skin contact are expected.
Likely routes of exposure - eye contact	Direct eye contact with eyes may cause temporary irritation.
Likely routes of exposure - ingestion	Expected to be a low ingestion hazard.
Symptoms related to toxicological characteristics	Dusts may irritate the respiratory tract, skin and eyes.
Acute toxicity - dermal - LD50 - rat	2000 mg/kg
Acute toxicity - oral - LD50 - mouse	> 15000 mg/kg
Acute toxicity - oral - LD50 - rat	5000 mg/kg
Skin irritation	Not expected to be hazardous by OSHA criteria.
Eye irritation	Direct contact with eyes may cause temporary irritation.
Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	Not expected to be hazardous by OSHA criteria. Not expected to be hazardous by WHMIS criteria.
IARC overall evaluation of carcinogenicity	3 Not classifiable as to carcinogenicity to humans.
OSHA specifically regulated substances	Not listed.
Reproductive toxicity	Not expected to be hazardous by OSHA criteria.
Specific target organ toxicity - single exposure	Not classified
Specific target organ toxicity - repeated exposure	Not classified

Aspiration hazard	Not an aspiration hazard
Chronic effects	Not expected to be hazardous by OSHA criteria. Not expected to be hazardous by WHMIS criteria.
Further information	This product has no known adverse effects on human health.
Amorphous Silica(112926-00-8)	
Acute toxicity	no data available
Acute toxicity: Inhalation	no data available
Acute toxicity: Dermal	no data available
Skin irritation	no data available
Eye irritation	no data available
Respiratory or skin sensation	no data available
Germ cell mutagenicity	no data available
Carcinogenicity: IARC: Group 3:	not classifiable as to its carcinogenicity to humans
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
Reproductive toxicity	no data available
Specific target organ toxicity - single exposure	no data available
Specific target organ toxicity - repeated exposure	no data available
Aspiration hazard	no data available
Additional information	Amorphous silica is not classified as to its carcinogenicity to humans, however, crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1, IARC). Therefore, amorphous silica should be handled as if possessing the same hazards as the crystalline form. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Additional information	Stomach - irregularities - based on human evidence
Diethanolamine(111-42-2)	
LD50 Oral - Rat - male and female	1,600 mg/kg (OECD Test Guideline 401)
LD50 Dermal - Rabbit	12,200 mg/kg
LD50 Intraperitoneal - Rat	120 mg/kg
LD50 Intravenous - Rat	778 mg/kg
Skin Corrosion/irritation	No data available
Serious eye damage/eye irritation	Rabbit - Risk of serious damage to eyes (OECD Test Guideline 405)
Respiratory or skin sensitization	Guinea pig - Did not cause sensitization on laboratory animals
Germ cell mutagenicity	Micronucleus test lymphocyte - Result Negative
Mutagenicity (micronucleus test) Mouse male and female	Result: Negative
Carcinogenicity - IARC	2B - Group 2B Possibly carcinogenic to humans
Carcinogenicity - 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
Carcinogenicity - 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
Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	No data available
Specific target organ toxicity - repeated exposure	No data available
Aspiration hazard	No data available
Additional information	Repeated dose toxicity - rat - male and female - oral Lowest observed adverse effect level - 25 mg/kg RTECS: KL297500
Additional information	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated
Additional information	Liver - Irregularities - Based on Human Evidence
Pentaerythritol tetrakis(6683-19-8)	
Acute toxicity - LD50 - oral - male rat	> 5000 mg/kg
Acute toxicity - LC50 - inhalation - male and female rat	> 1.95 mg/l / 4h
Acute toxicity - LD50 - dermal - male and female rabbit	> 3160 mg/kg
Acute toxicity - LD50 - intraperitoneal - rat	> 1000 mg/kg



Skin corrosion - rabbit	No skin irritation - 24 h
Eye irritation - rabbit	No eye irritation
Respiratory or skin sensitization - guinea pig	Does not cause skin sensitization
Germ cell mutagenicity - Ames test - S. typhimurium	Negative
Mutagenicity - micronucleus test - male and female hamster	Negative
IARC carcinogenicity	No component of this product present at levels greater than or equal to 0.1% is identified as a 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
Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	No data available
Specific target organ toxicity - repeated exposure	No data available
Aspiration hazard	No data available
Titanium Dioxide(13463-67-7)	
Acute toxicity - LD50 - oral - rat	> 10000 mg/kg
Acute toxicity - inhalation	No data available
Acute toxicity - LD50 - dermal - rabbit	> 10000 mg/kg
Skin irritation - human	Mild skin irritation - 3 h
Eye irritation - rabbit	No eye irritation
Respiration or skin sensitisation	Will not occur
Germ cell mutagenicity - hamster - ovary - micronucleus test	No results available
Germ cell mutagenicity - hamster - lungs	DNA inhibition
Germ cell mutagenicity - hamster - ovary - sister chromatid exchange	No results available
Germ cell mutagenicity - mouse - micronucleus test	No results available
IARC	No component of this product present at levels greater than or equal to 0.1% is identified as a 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
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
Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	No data available
Specific target organ toxicity - repeated exposure	No data available
Aspiration hazard	No data available
Additional information	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated
Tris(2,4-ditert-butylphenyl) phosphite(31570-04-4)	
LD50 - oral - male and female rat - Acute Toxicity	> 6000 mg/kg
LD50 - dermal - male and female rat	> 2000 mg/kg
Skin irritation - rabbit	No skin irritation / 24 h
Eye irritation- rabbit	No eye irritation / 30 s
Respiratory or skin sensitization - guinea pig	Does not cause skin sensitization
Germ cell mutagenicity -Ames test (micronucleus test) - male and femae hamster	Negative
Carcinogenicity - oral - male and female rat	No adverse effect has been observed in chronic toxicity tests

IARC	No component of this product present at levels greater than or equal to 0.1% is identified as a 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
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
Reproductive toxicity	Not data available
Developmental toxicity - oral - rabbit	No adverse effect has been observed in chronic toxicity tests
Specific target organ toxicity - single exposure	No data available
Specific target organ toxicity - repeated exposure	No data available
Additional information	Repeated dose toxicity - rat - male and female - oral - No observed adverse effect level - >/ 1000 mg/kg
Additional information	No adverse effect has been observed in chronic toxicity tests

12. ECOLOGICAL INFORMATION

1,3,5-Triglycidyl Isocyanurate(2451-62-9)	
Toxicity to fish - static test LC50 - danio rerio (zebra fish)	> 77 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates - Immobilization - EC50 - daphnia magna (water flea)	> 100 mg/l - 24 h
Toxicity to algae - growth inhibition - EC50 - Desmodesmus subspicatus	29 - 30 mg/l - 72 h
Toxicity to bacteria - Respiration inhibition - IC50 - Sludge Treatment	> 100 mg/l 3 h
Persistence and degradability - biodegradability - aerobic - exposure time: 44 d	0.5 - 1% - not biodegradable
Bioaccumulative potential	No data available
Mobility in soil	No data available
PBT & vPvB	not available/not required
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
2-Mercaptobenzothiazole(149-30-4)	
Toxicity to fish - flow-through test - LC50 - rainbow trout	0.73 mg/L / 96 h
Toxicity to daphnia and other aquatic invertebrates - immobilization EC50 - Daphnia magna (water flea)	0.71 mg/L / 48 h
Toxicity to algae - growth inhibition - EC50 - green algae	0.5 mg/L - 72 h
Persistence and degradability - biodegradability - biotic/aerobic	1% - not readily biodegradable - exposure time: 28 d
Bioaccumulative potential - bioaccumulation - carp	0.1 mg/L / 42 d
Bioaccumulative potential - Bioconcentration factor	< 0.8
Mobility in soil	No data available
PBT and vPvB	Not available/not required
Other adverse effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.
Aluminum Oxide(1344-28-1)	
Toxicity	No toxicity at the limit of solubility
Persistence and degradability	The methods for determining biodegradability are not applicable to inorganic substances
Bioaccumulative potential	Does not bioaccumulate
Mobility in soil	No data available
PBT and vPvB	Not available/not required



Other adverse effects	No data available.
Aluminum(7429-90-5)	
Ecotoxicity	Ecological injuries are not known or expected under normal use.
Aquatic toxicity - aluminum - LC50 - rainbow trout	0.16 mg/L / 96 h
Aquatic toxicity - silicon dioxide - IC50 - algae	440 mg/L / 72 h
Aquatic toxicity - silicon dioxide - EC50 - daphnia	7600 mg/L / 48 h
Aquatic toxicity - silicon dioxide - LC50 - fish	5000 mg/L / 96 h
Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available
Mobility in soil	No data available
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.
Amorphous Silica(112926-00-8)	
Toxicity	no data available
Persistence and degradability	no data available
Bioaccumulative potential	no data available
Mobility in soil	no data available
PBT and vPvB	not available/not required
Diethanolamine(111-42-2)	
Toxicity to fish	LC50 - Pimephales promelas (fathead minnow) - 1,460 mg/l - 96h
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water Flea) - 30.1 mg/l - 48h
Persistence and degradability	Biodegradability - aerobic - Exposure time 28d - Result: 93% Readily biodegradable (OECD Test Guideline 301F)
Bioaccumulative potential	No data available
Mobility in Soil	No data available
Results of PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
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
Pentaerythritol tetrakis(6683-19-8)	
Toxicity to fish - static LC50 - zebra fish	> 100 mg/L / 96 h
Toxicity to daphnia and other aquatic invertebrates - immobilization EC50 - daphnia magna (water flea)	> 86 mg/L / 24 h
Toxicity to algae - static EC50 - Scenedesmus subspicatus	> 100 mg/L / 72 h
Toxicity to bacteria - respiration inhibition IC50 - sludge treatment	> 100 mg/L / 3 h
Persistence and degradability - biodegradability - aerobic	5% - not biodegradable : exposure time - 28 d
Bioaccumulative potential	No data available
Mobility in soil	No data available
PBT and vPvB	Not available/not required
Other adverse effects	No data available
Titanium Dioxide(13463-67-7)	
Toxicity to fish - LC50 - other fish	> 1000 mg/L / 96 h
Toxicity to daphnia and other aquatic invertebrates - EC50 - Daphnia magna (water flea)	> 1000 mg/L / 48 h
Toxicity to daphnia and other aquatic invertebrates - EC0 - Daphnia magna (water flea)	1000 mg/L / 48 h
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
PBT and vPvB	Not available/not required
Other adverse effects	No data available
Tris(2,4-ditert-butylphenyl) phosphite(31570-04-4)	
Toxicity to fish - static LC0 - zebra fish	100 mg/L / 96 h



Toxicity to daphnia and other aquatic invertebrates - static EC50 - Daphnia magna	510 mg/L / 24 h
Toxicity to algae - static EC50 - Scenedesmus subspicatus	> 75 mg/L / 72 h
Toxicity to bacteria - respiration inhibition IC50 - sludge treatment	> 100 mg/L / 3 h
Persistence and degradability - biodegradability - aerobic	6% - not readily biodegradable - exposure: 28 d
Bioaccumulative potential	No data available
Mobility in soil	No data available
PBT and vPvB	not available/not required

13. DISPOSAL CONSIDERATIONS**WASTE TREATMENT METHODS****GENERAL INFORMATION :** No data available.**DISPOSAL METHOD:** Dispose of in accordance with Local, State, Regional, National and International Regulations.

Ecology - waste materials: Avoid release to the environment.

14. TRANSPORT INFORMATION***CHECK WITH YOUR CARRIER FOR ADDITIONAL RESTRICTIONS THAT MAY APPLY.****USDOT GROUND****DOT (DEPARTMENT OF TRANSPORTATION)****PROPER SHIPPING NAME (DOT) :** Not Regulated/Not Applicable**HAZARDS CLASS :** None**UN/NA NUMBER :** Not Applicable**PACKING GROUP :** None**EMERGENCY RESPONSE GUIDE (ERG) :** Not Applicable**IATA (AIR)****DOT (INTERNATIONAL AIR TRANSPORTATION ASSOCIATION)****PROPER SHIPPING NAME :** Not Regulated/Not Applicable**HAZARDS CLASS :** Not Applicable**UN/NA NUMBER :** Not Applicable**PACKING GROUP :** Not Applicable**EMERGENCY RESPONSE GUIDE (ERG) :** Not Applicable**IMDG (OCEAN)****PROPER SHIPPING NAME :** Not Regulated , Not Applicable**HAZARDS CLASS :** Not Applicable**UN/NA NUMBER :** Not Applicable**PACKING GROUP :** Not Applicable**EMERGENCY RESPONSE GUIDE (ERG) :** Not Applicable**MARINE POLLUTANT :** No**SPECIAL PRECAUTIONS :** P235 Keep cool.

**15. REGULATORY INFORMATION****US FEDERAL REGULATIONS**

All ingredients are TSCA (Toxic Substance Control Act) listed.

OSHA HAZARDS : Flammable liquid, Moderate skin irritant, Moderate eye irritant, Carcinogen.

EPCRA - Emergency

CERCLA REPORTABLE QUANTITY

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

This product contains:	Chemical CAS#
Aluminum	7429-90-5
1,3,5-Triglycidyl Isocyanurate	2451-62-9
Titanium Dioxide	13463-67-7

SARA 313 : This Product Contains Aluminum Powder (CAS 7429-90-5)

CLEAN AIR ACT :**INTERNATIONAL REGULATIONS****CLASSIFICATION ACCORDING TO REGULATION (EC) No. 1272/2008 (CLP) :**

Carc. 2 H351 Suspected of causing cancer
STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure

NATIONAL REGULATIONS

This product contains:	Chemical CAS#
~Titanium Dioxide	13463-67-7

National Regulations Key




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

^ Indicates a chemical listed by IARC as carcinogenic to humans.

**STATE REGULATIONS
CALIFORNIA PROPOSITION 65**

This product contains:	Chemical CAS#
*Titanium Dioxide	13463-67-7
*Diethanolamine	111-42-2
*2-Mercaptobenzothiazole	149-30-4

Proposition 65 Key

- *  **WARNING:** This product can expose you to a chemical(s), including those listed above, which is (are) known to the State of California to cause cancer.
For more information visit WWWPROP65.CA.GOV.
- #  **WARNING:** This product can expose you to a chemical(s), including those listed above, which is (are) known to the State of California to cause birth defects or other reproductive harm.
For more information visit WWWPROP65.CA.GOV.
- +  **WARNING:** This product can expose you to a chemical(s), including those listed above, which is (are) known to the State of California to cause cancer and birth defects or other reproductive harm.
For more information visit WWWPROP65.CA.GOV.

Massachusetts Right to Know

This product contains	Chemical CAS#
Aluminum	7429-90-5
Titanium Dioxide	13463-67-7
Amorphous Silica	112926-00-8
Aluminum Oxide	1344-28-1
Diethanolamine	111-42-2
Ethylenediamine	107-15-3

Pennsylvania Right to Know

This product contains	Chemical CAS#
Aluminum	7429-90-5
Titanium Dioxide	13463-67-7
Amorphous Silica	112926-00-8
Pentaerythritol tetrakis	6683-19-8
Tris(2,4-ditert-butylphenyl) phosphite	31570-04-4
Aluminum Oxide	1344-28-1
Diethanolamine	111-42-2
2-Mercaptobenzothiazole	149-30-4
Ethylenediamine	107-15-3

**New Jersey Right to Know**

This product contains	Chemical CAS#
Aluminum	7429-90-5
1,3,5-Triglycidyl Isocyanurate	2451-62-9
Titanium Dioxide	13463-67-7
Amorphous Silica	112926-00-8
Pentaerythritol tetrakis	6683-19-8
Tris(2,4-ditert-butylphenyl) phosphite	31570-04-4
Aluminum Oxide	1344-28-1
Diethanolamine	111-42-2
2-Mercaptobenzothiazole	149-30-4
Ethylenediamine	107-15-3

16. OTHER INFORMATION**Other Product Information:**

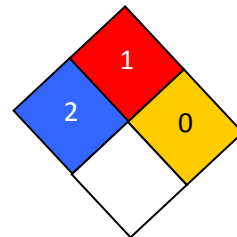
% Volatile by Volume : 0.02 % Volatile by Weight : 0.02
% Solids by volume : 99.98 % Solids by Weight : 99.98

VOC CONTENT:

Content tested per EPA METHOD 24, ASTM D2369 is less than 1% Wt/Wt.

HMIS RATING

Health :	2
Flammability :	1
Reactivity :	0
Personal Protection :	E

NFPA CODES

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