

ARDINAL SAFETY DATA SHEET

T075-WH34 BLACK/WHITE

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:	T075-WH34 BLACK/WHITE
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 : DANGER

HAZARD STATEMENTS :

- H412 Harmful to aquatic life with long lasting effects.
- H340 May cause genetic defects.
- H351 Suspected of causing cancer.
- H317 May cause an allergic skin reaction.
- H372 Causes damage to organs through prolonged or repeated exposure.
- H318 Causes serious eye damage.

PRECAUTIONARY STATEMENTS:

P201 Obtain special instructions before use.

- P260 Do not breathe dust.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P202 Do not handle until all safety precautions have been read and understood.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Weight %	CAS Number
Titanium Dioxide	25% - 30%	13463-67-7
1,3,5-Triglycidyl Isocyanurate	1% - 5%	2451-62-9
Aluminum Oxide	<1%	1344-28-1

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.



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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 victim to fresh air and keep at rest in a position comfortable for breathing. 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/m3 8 hours	
Aluminum Oxide(1344-28-1)	Aluminum Oxide(1344-28-1)		
USA OSHA	(OEL) Table Z-1, TWA	15 mg/m3	
USA ACGIH	(TLV) TWA	1 mg/m3	
Amorphous Silica(112926-00-8)	Amorphous Silica(112926-00-8)		
USA OSHA	USA OSHA TWA (Table Z-1)	6 mg/m3	
USA OSHA	USA OSHA TWA (Tabla Z-3)	20 Million particals per cubic foot.	
USA NIOSH	USA NIOSH TWA (REL)	6 mg/m3	
Carbon Black(1333-86-4)			
ACGIH TLV (Threshold Limit Value)	TWA (Time Weighted Average)	3 mg/m3 8 hours	
OSHA PEL (Permissible Exposure Limit)	TWA (Time Weighted Average)	3.5 mg/m3 8 hours	
NIOSH REL (Recommended Exposure	TWA (Time Weighted Average)	3.5 mg/m3 8 hours	
Limit)			
NIOSH REL (Recommended Exposure	TWA (Time Weighted Average)	0.1mg of PAHs/cm3 10 hours	
Limit)			
Crystalline Silica(14808-60-7)			
ACGIH TLV (Threshold Limit Value)	TWA (Time Weighted Average)	0.025 mg/m3 8 hours	
Glycerol(56-81-5)	Γ		
USA ACGIH	USA ACGIH TWA (TLV)	10 mg/m3	
USA OSHA	USA OSHA TWA (OEL) Table Z-1	15 mg/m3	
Limestone(1317-65-3)			
ACGIH	Not Applicable	Not Applicable	
OSHA PEL (Permissible Exposure Limit)	TWA (Time Weighted Average)	15 mg/m3 (Total Dust) 8 hours	
OSHA PEL (Permissible Exposure Limit	TWA (Time Weighted Average)	5 mg/m3 (Respirable Fraction) 8 hours	
NIOSH REL (Recommende Exposure LImit)	TWA (Time Weighted Average)	15 mg/m3 (Total Dust) 8 hour	
NIOSH REL (Recommende Exposure	TWA (Time Weighted Average)	5 mg/m3 (Respirable Fraction) 8	
LImit)		hours	
Titanium Dioxide(13463-67-7)	TWA (Time Weighted Average)	10 m g / m 2 . 8 h g u m	
ACGIH TLV (Threshold Limit Value)	TWA (Time Weighted Average)	10 mg/m3 8 hours	
OSHA PEL (Permissible Exposure Limit)	TWA (Time Weighted Average)	15 mg/m3 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	:	1.6668
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 : Avoid contact with strong oxidizing agents.

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 -	> 650 mg/m3
male - 4 h	
Acute toxicity - LD50 - Dermal - rat- male	> 2000 mg/kg
& female	
Skin irritation - rabbit	Mild skin irritation - 24 hours
Eye irritation - rabbit	Severe eye irritation
Respiratory or skin sensation -	May cause sensitization by skin contact
Maximization test - guinea pig	
Germ cell mutagenicity	In vivo tests showed mutagenic effects
Germ cell mutagenicity - AMES test - S. typhimurium	Positive
Germ cell mutagenicity - AMES test -	Positive
mouse - male	
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	No data available
exposure	
Specific target organ toxicity - repeated	No data available
exposure	
Aspiration hazard	No data available
Additional information	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated
Aluminum Oxide(1344-28-1)	properties have not been thoroughly investigated
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 -	DId not cause sensitisation on laboratory animals
maximisation test - guinea pig	
Germ cell mutagenicity	No data available
Carcinogenicity	This product is or contains a component that is not classifiable as to its
	carcinogenicty 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

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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
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
Barium Sulfate(7727-43-7) Acute toxicity - inhalation	No data available
Acute toxicity - Innalation Acute toxicity - Dermal	No data available
Skin irritation	No data available
	No data available
Eye irritation Respiratory or skin sensation	l No data available
Respiratory or skin sensation Germ cell mutagenicity - mouse -	No data available No reported data
Respiratory or skin sensation Germ cell mutagenicity - mouse - micronucleus test	No reported data
Respiratory or skin sensation Germ cell mutagenicity - mouse -	No reported data Equivocal tumorigenic agent by RTECS criteria. Lungs, Thorax, or
Respiratory or skin sensation Germ cell mutagenicity - mouse - micronucleus test Carcinogenicity - rat - intrapleural -	No reported data
Respiratory or skin sensation Germ cell mutagenicity - mouse - micronucleus test Carcinogenicity - rat - intrapleural - tumorigenic	No reported data Equivocal tumorigenic agent by RTECS criteria. Lungs, Thorax, or Respiration: Tumors 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 No component of this product present at levels greater than or equal to
Respiratory or skin sensation Germ cell mutagenicity - mouse - micronucleus test Carcinogenicity - rat - intrapleural - tumorigenic IARC	No reported data Equivocal tumorigenic agent by RTECS criteria. Lungs, Thorax, or Respiration: Tumors 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 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 No component of this product present at levels greater than or equal to
Respiratory or skin sensation Germ cell mutagenicity - mouse - micronucleus test Carcinogenicity - rat - intrapleural - tumorigenic IARC ACGIH	No reported data Equivocal tumorigenic agent by RTECS criteria. Lungs, Thorax, or Respiration: Tumors 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 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
Respiratory or skin sensation Germ cell mutagenicity - mouse - micronucleus test Carcinogenicity - rat - intrapleural - tumorigenic IARC ACGIH NTP OSHA Reproductive toxicity	No reported data Equivocal tumorigenic agent by RTECS criteria. Lungs, Thorax, or Respiration: Tumors 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 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 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 No component of this product present at levels greater than or equal to
Respiratory or skin sensation Germ cell mutagenicity - mouse - micronucleus test Carcinogenicity - rat - intrapleural - tumorigenic IARC ACGIH NTP OSHA	No reported data Equivocal tumorigenic agent by RTECS criteria. Lungs, Thorax, or Respiration: Tumors 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 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 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 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 No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by NTP 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
Respiratory or skin sensation Germ cell mutagenicity - mouse - micronucleus test Carcinogenicity - rat - intrapleural - tumorigenic IARC ACGIH NTP OSHA Reproductive toxicity Specific target organ toxicity - single	No reported data Equivocal tumorigenic agent by RTECS criteria. Lungs, Thorax, or Respiration: Tumors 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 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 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 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 No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by NTP 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 No data available
Respiratory or skin sensation Germ cell mutagenicity - mouse - micronucleus test Carcinogenicity - rat - intrapleural - tumorigenic IARC ACGIH NTP OSHA Reproductive toxicity Specific target organ toxicity - single exposure Specific target organ toxicity - repeated exposure	No reported data Equivocal tumorigenic agent by RTECS criteria. Lungs, Thorax, or Respiration: Tumors 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 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 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 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 No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by NTP 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 No data available No data available
Respiratory or skin sensation Germ cell mutagenicity - mouse - micronucleus test Carcinogenicity - rat - intrapleural - tumorigenic IARC ACGIH NTP OSHA Reproductive toxicity Specific target organ toxicity - single exposure Specific target organ toxicity - repeated	No reported data Equivocal tumorigenic agent by RTECS criteria. Lungs, Thorax, or Respiration: Tumors 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 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 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 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 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 No data available No data available



Carbon Black(1333-86-4)	
LD50 Oral - Rat	> 8,000 mg/kg, male and female, (OECD Test Guideline 401)
LD50 Inhalation - Rat	No data available
LD50 Dermal - Rabbit	> 3,000 mg/kg
Skin corrosion/irritation	No skin irritation - 24 h, (OECD Test Guideline 404)
Eye damage/irritation - Rabbit	No eye irritation, (OECD Test Guideline 405)
Respiratory/skin sensitization - Guinea pig	Did not cause sensitization on laboratory animals, (OECD Test Guideline 406)
Germ cell mutagenicity	Ames test, S. typhimurium, negative
Hamster - Ovary	Negative
DNA repair - Rat - Female	Negative
Carcinogenicity - Rat - Inhalation	Tumorigenic: Carcinogenic by RTECS criteria. Lungs, Thorax, or Respiration: Tumors. This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification. Limited evidence of carcinogenicity in animal studies.
IARC	2B - Group 2B: Possibly carcinogenic to humans (carbon black)
NTP	No component of this product present at levels greater than or equal to0.1% is identified as a known or anticipated carcinogen by NTP
OSHA	No component of this product present at levels greater than 0.1% is
Poproductivo tovicity	identified as a carcinogen or potential carcinogen by OSHA
Reproductive toxicity	No data available
Organ toxicity	Specific target organ toxicity - single exposure: No data available
Organ toxicity	Specific target organ toxicity - repeated exposure: No data available
Aspiration hazard Additional Information	No data available
	RTECS: FF5800000 To the best of our knowledge, the chemical , physical, and toxicological properties have not been throughly investigated.
Crystalline Silica(14808-60-7)	
Acute Inhalation toxicity	no data available
Acute Dermal toxicity	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	Limited evidence of carcinogenicity in human studies
IARC	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
Reproductive toxicity	no data available
Specific target organ toxicity - single exposure	no data available
Specific target organ toxicity - repeated exposure - inhalation	may cause damage to organs through prolonged or repeated exposure
Aspiration hazard	no data available
Additional information	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 stage, loss of appetite, pleuric 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 studies are needed to determine whether the cell transforming activity of quartz is
Additional information	related to its carcinogenic potential.
Additional information	Liver - Irregularities - based on human evidence
Glycerol(56-81-5)	12 600 mg/kg
Acute toxicity - LD50 - oral - rat	12,600 mg/kg
Acute toxicity - inhalation	No data available
Acute toxicity - LD50 - dermal - rabbit	> 10,000 mg/kg
Skin irritation - rabbit	Mild skin irritation / 24 h
Eye irritation - rabbit	Mild eye irritation / 24 h



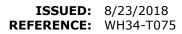
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Respiratory or skin sensitization	No data available
Germ cell mutagenicity	No data available
IARC	No component of this product present at levels greater than or equal to 0.1% is identified as a probable, possible or confirmed human carcinogen by IARC
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	Prolonged or repeated exposure may cause: nausea headache, vomitting
Additional information	To the best of our knowledge, the chemical, physical, and toxicological porperties have not been thoroughly investigated.
Additional information	Kidney irregularities based on human evidence
Limestone(1317-65-3)	
Draize test, rabbit, eye	750 ug/24H severe
Draize test, rabbit, skin	500 mg/24H moderate
Oral, rat: LD50	6450 mg/kg
ACGIH, IARC, NTP, CA Prop 65	Not listed
Epidemiology	No information available
Teratogenicity	No information available
Reproductive effects	No information available
Mutagenicity	No information available
Neurotoxicity	No information 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

12. ECOLOGICAL INFORMATION

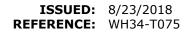
1,3,5-Triglycidyl Isocyanurate(2451-62-9)	
Toxicity to fish - static test LC50 - danio	> 77 mg/l - 96 h
rerio (zebra fish)	

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invertebrates - Immobilization - EC50 - daphnia magna (water flea) Toxicity to algae - growth inhibition - EC50 - Desmodesmus subspicatus Toxicity to bacteria - Respiration inhibition	> 100 mg/l - 24 h 29 - 30 mg/l - 72 h
daphnia magna (water flea) Toxicity to algae - growth inhibition - EC50 - Desmodesmus subspicatus Toxicity to bacteria - Respiration inhibition	29 - 30 mg/l - 72 h
Toxicity to algae - growth inhibition - EC50 - Desmodesmus subspicatus Toxicity to bacteria - Respiration inhibition	29 - 30 mg/l - 72 h
- Desmodesmus subspicatus Toxicity to bacteria - Respiration inhibition	29 - 30 mg/l - 72 h
Toxicity to bacteria - Respiration inhibition	29 50 119/1 72 11
	> 100 mg/l 3 h
- IC50 - Sludge Treatment	
	0.5 - 1% - not biodegradable
biodegradability - aerobic - exposure time:	
44 d	
	No data available
	No data available
	not available/not required
	An environmental hazard cannot be excluded in the event of
	unprofessional handling or disposal. Harmful to aquatic life with long
	lasting effects
	lasting enects
Aluminum Oxide(1344-28-1)	No. 1. 1. 1. J. J. J. M.
	No toxicity at the limit of solubility
	The methods for determining biodegradability are not applicable to
	inorganic substances
	Does not bioaccumulate
	No data available
	Not available/not required
Other adverse effects	No data available.
Amorphous Silica(112926-00-8)	
	no data available
,	no data available
	no data available
	no data available
	not available/not required
Barium Sulfate(7727-43-7)	
	No data available
	The methods for determining biodegradability are not applicable in
	inorganic substances
	No data available
	No data available
	not available/not required
Carbon Black(1333-86-4)	
	Danio rerio (zebra fish) >1000 mg/l - 96 h
EC50 Toxicity to daphnia and other aquatic	Daphnia magna (Water flea) > 5600 mg/l - 24 h (OECD Test Guideline
invertebrates	202)
EC50 Toxicity to algae	Desmodesmus subspicatus (green algae > 10,000 mg/l - 72 h (OECD Test
	Guideline 201)
	No data available
	No data available
	No data available
	Not available/not required
Crystalline Silica(14808-60-7)	
	no data available
	no data available
· · · · · · · · · · · · · · · · · · ·	no data available
	no data available
	no data available
	not available/not required
Glycerol(56-81-5)	
	No data available
Persistence and degradability	No data available
	No data available
	No data available
	Not available/not required
	No data available
Limestone(1317-65-3)	
	No data available
	No information reported
•	No information 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 - Dapphnia 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 vPbV	Not available/not required
Other adverse effects	No data available

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.



SAFETY DATA SHEET

15. REGULATORY INFORMATION

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

OSHA HAZARDS : Moderate skin irritant, Moderate eye irritant. 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 : Acute Health Hazard, Chronic Health Hazard.

This product contains:	Chemical CAS#
Titanium Dioxide	13463-67-7
1,3,5-Triglycidyl Isocyanurate	2451-62-9
Aluminum Oxide	1344-28-1

SARA 313 : No SARA 313 chemicals are present

CLEAN AIR ACT :

INTERNATIONAL REGULATIONS

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

Eye Dam. 1	H318	Causes serious eye damage
Skin Sens. 1	H317	May cause an allergic skin reaction
Muta. 1B	H340	May cause genetic defects
Carc. 2	H351	Suspected of causing cancer
STOT RE 1	H372	Causes damage to organs through prolonged or repeated exposure
Aquatic Chronic 3	H412	Harmful to aquatic life with long lasting effects

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	
*Carbon Black	1333-86-4	
*Crystalline Silica	14808-60-7	

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 <u>WWWPROP65.CA.GOV</u>.
 - **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 <u>WWWPROP65.CA.GOV</u>.
- **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 <u>WWWPROP65.CA.GOV</u>.

Massachusetts Right to Know

This product contains	Chemical CAS#	
Titanium Dioxide	13463-67-7	
Limestone	1317-65-3	
Aluminum Oxide	1344-28-1	
Carbon Black	1333-86-4	
Barium Sulfate	7727-43-7	
Crystalline Silica	14808-60-7	
Amorphous Silica	112926-00-8	
Glycerol	56-81-5	

Pennsylvania Right to Know

This product contains	Chemical CAS#
Titanium Dioxide	13463-67-7
Limestone	1317-65-3
Aluminum Oxide	1344-28-1
Carbon Black	1333-86-4
Barium Sulfate	7727-43-7
Crystalline Silica	14808-60-7
Amorphous Silica	112926-00-8
Butyltriphenylphoshonium Chloride	13371-17-0
Glycerol	56-81-5



New Jersey Right to Know

This product contains	Chemical CAS#
Titanium Dioxide	13463-67-7
Limestone	1317-65-3
1,3,5-Triglycidyl Isocyanurate	2451-62-9
Aluminum Oxide	1344-28-1
Carbon Black	1333-86-4
Barium Sulfate	7727-43-7
Crystalline Silica	14808-60-7
Amorphous Silica	112926-00-8
Butyltriphenylphoshonium Chloride	13371-17-0
Glycerol	56-81-5



RDINAL SAFETY DATA SHEET

16. OTHER INFORMATION

Other Product Information:

% Volatile by Volume :	0.00
% Solids by volume :	100.00

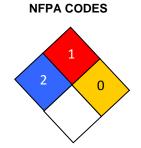
% Volatile by Weight : 0.00 % Solids by Weight : 100.00

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



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