

T031-WH06 PEARL WHITE

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: T031-WH06 PEARL 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	20% - 25%	13463-67-7
1,3,5-Triglycidyl Isocyanurate	1% - 5%	2451-62-9
Hydrated magnesium silicate	1% - 5%	14807-96-6
Silicon Dioxide	1% - 5%	7631-86-9

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 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.



SAFETY DATA SHEET

ISSUED: 8/23/2018 **REFERENCE:** WH06-T031

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

1.25 T. 1.11 T. 1.12 (2451.62)				
1,3,5-Triglycidyl Isocyanurate(2451-62-9		1005 / 201		
ACGIH TLV (Threshold Limit Value)	TWA (Time Weighted Average)	0.05 mg/m3 8 hours		
2-Mercaptobenzothiazole(149-30-4)	I (MEEL) TIME	T		
USA WEEL	(WEEL) TWA	5 mg/m3		
Amorphous Pyrogenic Silica(112945-52-				
USA OSHA	USA OSHA TWA (OEL Table Z-3)	80 mg/m3 3/%SiO2		
USA NIOSH	USA NIOSH TWA (REL)	6 mg/m3		
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		
Hydrated magnesium silicate(14807-96-				
ACGIH TLV (Threshold Limit Value)	TWA (Time Weighted Average)	2 mg/m3 (Respirable Fraction) 8 hours		
NIOSH REL(Recommended Exposure	TWA (Time Weighted Average)	2 mg/m3 (Respirable Fraction) 10		
Limit)	, , , , , , , , , , , , , , , , , , , ,	hours		
Iron Oxide(1309-37-1)				
USA ACGIH	USA ACGIG (TLV) TWA	5 mg/m3		
USA OSHA	USA OSHA (OEL) TWA Table Z-1	15 mg/m3		
USA NIOSH	USA NIOSH (REL) TWA	5 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 LImit)	TWA (Time Weighted Average)	5 mg/m3 (Respirable Fraction) 8 hours		
Silicon Dioxide(7631-86-9)				
USA NIOSH	USA NIOSH TWA (REL)	6 mg/m3		
USA OSHA	USA OSHA TWA (REL)	20 mppcf		
Titanium Dioxide(13463-67-7)	USA USHA TWA (Table 2-3)	ZU IIIPPCI		
	TWA (Time Weighted Asserted)	10 mg/m2 0 ha:::::		
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	:	1.6819
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.	Positive
typhimurium	
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
1.000	by IARC
ACGIH	No component of this product present at levels greater than or equal to
NED	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
OSHA	0.1% is identified as a known or anticipated carcinogen by NTP
USHA	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
	No data available
Specific target organ toxicity - single exposure	ino data available
Specific target organ toxicity - repeated	No data available
exposure	140 data available
Aspiration hazard	No data available
Additional information	To the best of our knowledge, the chemical, physical, and toxicological
/ data and mornation	properties have not been thoroughly investigated
	properties have not been thoroughly investigated



2 Marcantohanzathiazala(140, 20, 4)	
2-Mercaptobenzothiazole(149-30-4) Acute toxicity - LD50 - oral - male and	3800 mg/kg
femal rat	5000 mg/kg
Acute toxicity - LC50 - inhalation - rat	> 1270 mg/m3
Acute toxicity - LD50 - dermal - male and	> 7940 mg/kg
female rabbit	3, 3
Skin irritation - rabbit	No skin irritation / 24 h
Eye irritation - rabbit	No eye irritation / 24 h
Respiratory or skin sensitisation - Buehler	May cause allergic skin reaction
test - guinea pig	
Respiratory or skin sensitisation -	May cause allergic skin reaction
Maximisation test - guinea pig	N
Germ cell mutagenicity - Ames test - S.	Negative
typhimurium Germ cell mutagenicity - male and female	Negative
mouse	Negative
IARC	No component of this product present at levels greater than or equal to
27.11.0	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
Daniel de die de la 191	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	No data available
exposure	No data avallable
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
Amorphous Pyrogenic Silica(112945-52-5)	,
Acute toxicity - Inhalation	No data available
Acute toxicity - Dermal	No data available
Skin irritation	No data available
Respiratory or skin sensation	No data available
Germ cell mutagenicity - rat - lungs Germ cell mutagenicity - rat	Body fluid assay
Carcinogenicity - Rat - Inhalation	Unscheduled DNA synthesis Tumorigenic: Carcinogenic by RTECS criteria. Lungs, thorax, or
Carcinogenicity - Kat - Illidiation	respiration: tumors
IARC	Not classifiable as to its carcinogenicity to human
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 as known or anticipated carcinogen
OSHA	No component of this product present at levels greater than or equal to
	0.1% is identifed as a carcinogen or potential carcinogen by OSHA
Reproductive toxicity	No data available
Specific target organ toxicity - single	No data available
exposure	No. 1 to 2011
Specific target organ toxicity - repeated	No data available
Aspiration hazard	No data available
Aspiration hazard Additional information	No data available To the best of our knowledge, the chemical, physical, and toxicological
Additional information	properties have not been thoroughly investigated
Additional information	Stomach irregularities based on human evidence
Amorphous Silica(112926-00-8)	- Storinger irregularities based on naman evidence
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
Respiratory or skill sensation	



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
7.0011	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	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)	Scottage in egalatices based on haman evidence
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 - mouse -	No reported data
micronucleus test	
Carcinogenicity - rat - intrapleural -	Equivocal tumorigenic agent by RTECS criteria. Lungs, Thorax, or
tumorigenic	Respiration: Tumors
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
ACGIH	by IARC No component of this product present at levels greater than or equal to
ACGIN	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
IVII	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	Prolonged inhalation of dust may cause baritosis, a benign
	pneumoconiosis. If ingested, the presence of soluble barium salts as
	impurities may cause toxic reactions due to bioaccumulation., Damage to
	the lungs., 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
Carbon Black(1333-86-4)	Joseph Grand Frederices Dased Off Human evidence
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
January, Samuel Pig	406)
Germ cell mutagenicity	Ames test, S. typhimurium, negative
Hamster - Ovary	Negative
DNA repair - Rat - Female	Negative
Bilitiepan Rac Female	



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
INTI	to0.1% is identified as a known or anticipated carcinogen by NTP
OCITA	
OSHA	No component of this product present at levels greater than 0.1% is
	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	No data available
Additional Information	RTECS: FF5800000 To the best of our knowledge, the chemical, physical,
/ taataana Imamaaan	and toxicological properties have not been throughly investigated.
Crystalline Silica(14808-60-7)	and toxicological properties have not been throughly investigated.
	no dete available
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
NED	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	no data available
exposure	
Specific target organ toxicity - repeated	may cause damage to organs through prolonged or repeated exposure
exposure - inhalation	may cause damage to organs through prolonged or repeated exposure
	data a
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.
	Liver - Irregularities - based on human evidence
Hydrated magnesium silicate(14807-96-6)	
Acute toxicity - inhalation	No data available
Acute toxicity - dermal	No data available
Skin irritation - human	Mild skin irritation 3 h
Eye irritation	No data available
Respiratory or skin sensitisation	I No ata avallable
Respiratory or skin sensitisation Germ cell mutagenicity	No ata available
Germ cell mutagenicity	No data available
	No data available Equivocal tumorigenic agent by RTECS criteria. Lungs, thorax, or
Germ cell mutagenicity Carcinogenicity - rat - inhalation	No data available Equivocal tumorigenic agent by RTECS criteria. Lungs, thorax, or respiration: Tumors
Germ cell mutagenicity Carcinogenicity - rat - inhalation IARC	No data available Equivocal tumorigenic agent by RTECS criteria. Lungs, thorax, or respiration: Tumors Group 3: Not classifiable as to its carcinogenicity to humans
Germ cell mutagenicity Carcinogenicity - rat - inhalation	No data available Equivocal tumorigenic agent by RTECS criteria. Lungs, thorax, or respiration: Tumors Group 3: Not classifiable as to its carcinogenicity to humans No component of this product present at levels greater than or equal to
Germ cell mutagenicity Carcinogenicity - rat - inhalation IARC NTP	No data available Equivocal tumorigenic agent by RTECS criteria. Lungs, thorax, or respiration: Tumors Group 3: Not classifiable as to its carcinogenicity to humans 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
Germ cell mutagenicity Carcinogenicity - rat - inhalation IARC	No data available Equivocal tumorigenic agent by RTECS criteria. Lungs, thorax, or respiration: Tumors Group 3: Not classifiable as to its carcinogenicity to humans No component of this product present at levels greater than or equal to
Germ cell mutagenicity Carcinogenicity - rat - inhalation IARC NTP	No data available Equivocal tumorigenic agent by RTECS criteria. Lungs, thorax, or respiration: Tumors Group 3: Not classifiable as to its carcinogenicity to humans 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
Germ cell mutagenicity Carcinogenicity - rat - inhalation IARC NTP	No data available Equivocal tumorigenic agent by RTECS criteria. Lungs, thorax, or respiration: Tumors Group 3: Not classifiable as to its carcinogenicity to humans 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
Germ cell mutagenicity Carcinogenicity - rat - inhalation IARC NTP OSHA Reproductive toxicity	No data available Equivocal tumorigenic agent by RTECS criteria. Lungs, thorax, or respiration: Tumors Group 3: Not classifiable as to its carcinogenicity to humans 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
Germ cell mutagenicity Carcinogenicity - rat - inhalation IARC NTP OSHA	No data available Equivocal tumorigenic agent by RTECS criteria. Lungs, thorax, or respiration: Tumors Group 3: Not classifiable as to its carcinogenicity to humans 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



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
Additional information	Stomach irregularities based on human evidence
Iron Oxide(1309-37-1)	
Acute toxicity	No data available
Acute toxicity Acute toxicity - dermal	`No data available
	Skin irritation
Skin irritation - human	
Eye irritation - human	Moderate eye irritation
Respiratory or skin sensitization	No data available
Germ cell mutagenicity	No data available
Carcinogenicity - rat - subcutaneous	Equivocal tumorogenic agent by RTECS criteria. Tumors at site of appilcation.
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	Group 3: not classifiable as to its carcinogenicity to humans (diiron
	trioxide).
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a kown or anticpated carcinogen by NTP.
OSHA	No component of this product present at levels greater than or equal to
	0.1% is identified as ca carcinogen or potential carcinogen by OSHA.
Reproductive toxicity	No data available
Specific target organ toxicity - single	inhalation - may cause respiratory irritation.
exposure	initiation may cause respiratory initiation.
Specific target organ toxicity - repeated	No data available
exposure	INO data avaliable
	No data available
Aspiration hazard	No data available
Additional information	Long term inhalation exposure to iron (oxide fume or dust) can cause
	siderosis. Siderosis is considered to be a benign pneumoconiosis and does
	not normally cause significant physiological impairment. Siderosis can be
	observed on x-rays with the lungs having a mottled appearance., To the
	best of our knowledge, the chemical, physical, and toxicological properties
	have not been thoroughly investigated.
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
	No information available
Epidemiology	
Teratogenicity	No information available
Reproductive effects	No information available
Mutagenicity	No information available
Neurotoxicity	No information available
Pentaerythritol tetrakis(6683-19-8)	
Acute toxicity - LD50 - oral - male rat	> 5000 mg/kg
Acute toxicity - LC50 - inahalation - male and female rat	> 1.95 mg/l / 4h
Acute toxicity - LD50 - dermal - male and	> 2160 mg/kg
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 sesnsitization - guinea	Does not cause skin sensitization
piq	
Germ cell mutagenicity - Ames test - S.	Negative
typhimurium	i i i i i i i i i i i i i i i i i i i
Mutagenicity - micronucleus test - male	Negative
and female hamster	
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
NTD	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
Silicon Dioxide(7631-86-9)	
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 sensitisation	No data available
Germ cell mutagenicity	No data available
IARC	Group 3: Not classifiable as to its carcinogenicity to humans (Silicon
TAIC	dioxide)
ACGIH	No component of this product present at levels greater than or equal to
ACGIT	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
INII	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
OSHA	0.1% is identified as a carcinogen or potential carcinogen by OSHA
Donus du ativa tavisitu	
Reproductive toxicity Specific target organ toxicity - single	No data available No data available
,	No data available
exposure	No. 1 to a selection
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
Additional information	Stomach irregularities based on human evidence (silicon dioxide)
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 -	No results available
micronucleus test	
Germ cell mutagenicity - hamster - lungs	DNA inhibition
Germ cell mutagenicity - hamster - ovary -	No results available
sister chromatid exchange	
Germ cell mutagenicity - mouse -	No results available
micronucleus test	
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	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
Tris(2,4-ditert-butylphenyl) phosphite(3157)	
LD50 - oral - male and female rat - Acute	> 6000 mg/kg
Toxicity	, J, J
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
=,=	1/



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 carconogen 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	No data available
exposure	
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	> 77 mg/l - 96 h
rerio (zebra fish)	5 .
Toxicity to daphnia and other aquatic	> 100 mg/l - 24 h
invertebrates - Immobilization - EC50 -	
daphnia magna (water flea)	
Toxicity to algae - growth inhibition - EC50	29 - 30 mg/l - 72 h
- Desmodesmus subspicatus	
Toxicity to bacteria - Respiration inhibition	> 100 mg/l 3 h
- IC50 - Sludge Treatment	
Persistence and degradability -	0.5 - 1% - not biodegradable
biodegradability - aerobic - exposure time:	
44 d	
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 -	0.73 mg/L / 96 h
rainbow trout	
Toxicity to daphnia and other aquatic	0.71 mg/L / 48 h
invertebrates - immobilization EC50 -	
Daphnia magna (water flea)	
Toxicity to algae - growth inhibition - EC50	0.5 mg/L - 72 h
- green algae	40/
Persistence and degradability -	1% - not readily biodegradable - exposure time: 28 d
biodegradability - biotic/aerobic	0.4 // / 42 - /
Bioaccumulative potential -	0.1 mg/L / 42 d
bioaccumulation - carp	
Bioaccumulative potential -	< 0.8
Bioconcentration factor	NI Later and Table
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
4 1 2 1 2 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2	lasting effects.
Amorphous Pyrogenic Silica(112945-52-5)	



Persistence and degradability on data available Bioaccumulative potential No data available (Amorphous Silica(112926-00-8) Persistence and degradability on data available (Amorphous	Toxicity	No data available
Bioaccumulative potential No data available Mobility in soil No data available PBT and vPvB not available/not required Amorphous Silica (112926-00-8) Toxicity no data available Bioaccumulative potential no data available PBT and vPvB not available/not required Nobility in soil no data available no data available PBT and vPvB not available/not required Nobility in soil no data available no data available PBT and vPvB not available/not required not available/not required Nobility in soil No data available not available/not required Nobility in soil No data available No data		
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Barium Sulfate(7727-43-7) Toxicity		
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PBT and vPvB	Bioaccumulative potential	
Carbon Black(1333-86-4) Toxicity to fish LCS0 Danio rerio (zebra fish) > 1000 mg/l - 96 h Daphnia magna (Water flea) > 5600 mg/l - 24 h (OECD Test Guideline 201) Daphnia magna (Water flea) > 5600 mg/l - 24 h (OECD Test Guideline 201) Persistence and degradability No data available Daphnia magna (Water flea) > 10,000 mg/l - 72 h (OECD Test Guideline 201) Persistence and degradability No data available Data		
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EC50 Toxicity to daphnia and other aquatic invertebrates 2021		
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IC50 - sludge treatment Persistence and degradability - biodegradability - aerobic Bioaccumulative potential Mobility in soil PBT and vPvB No data available No data available Not available/not required	Scenedesmus subspicatus	
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Bioaccumulative potential No data available Mobility in soil No data available PBT and vPvB Not available/not required	Persistence and degradability -	5% - not biodegradable : exposure time - 28 d
Mobility in soil No data available PBT and vPvB Not available/not required		No data available
PBT and vPvB Not available/not required		
Other adverse effects No data available		Not available/not required
	Other adverse effects	No data available



Silicon Dioxide(7631-86-9)		
Toxicity	No data available	
Persistence and degradability	No data available	
Bioaccumulative potential	No data available	
Mobility in soil	No data available	
PBT and vPvP	Not available/not required	
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	
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.

ARDINAL SAFETY DATA SHEET

ISSUED: 8/23/2018 **REFERENCE:** WH06-T031

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

ISSUED: 8/23/2018 **REFERENCE:** WH06-T031

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
Hydrated magnesium silicate	14807-96-6
Silicon Dioxide	7631-86-9

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
*Hydrated magnesium silicate	14807-96-6
*Crystalline Silica	14808-60-7
*Carbon Black	1333-86-4
*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 <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 WWWPROP65.CA.GOV.

Massachusetts Right to Know

This product contains	Chemical CAS#
Titanium Dioxide	13463-67-7
Limestone	1317-65-3
Hydrated magnesium silicate	14807-96-6
Silicon Dioxide	7631-86-9
Crystalline Silica	14808-60-7
Amorphous Silica	112926-00-8
Carbon Black	1333-86-4
Iron Oxide	1309-37-1
Barium Sulfate	7727-43-7

Pennsylvania Right to Know

This product contains	Chemical CAS#
Titanium Dioxide	13463-67-7
Limestone	1317-65-3
Hydrated magnesium silicate	14807-96-6
Silicon Dioxide	7631-86-9
Pentaerythritol tetrakis	6683-19-8
Crystalline Silica	14808-60-7
Amorphous Silica	112926-00-8
Carbon Black	1333-86-4
Tris(2,4-ditert-butylphenyl) phosphite	31570-04-4
2-Mercaptobenzothiazole	149-30-4
Iron Oxide	1309-37-1
Amorphous Pyrogenic Silica	112945-52-5
Barium Sulfate	7727-43-7



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
Hydrated magnesium silicate	14807-96-6
Silicon Dioxide	7631-86-9
Pentaerythritol tetrakis	6683-19-8
Crystalline Silica	14808-60-7
Amorphous Silica	112926-00-8
Carbon Black	1333-86-4
Tris(2,4-ditert-butylphenyl) phosphite	31570-04-4
2-Mercaptobenzothiazole	149-30-4
Iron Oxide	1309-37-1
Amorphous Pyrogenic Silica	112945-52-5
Barium Sulfate	7727-43-7



RDINAL SAFETY DATA SHEET

ISSUED: 8/23/2018 **REFERENCE:** WH06-T031

16. OTHER INFORMATION

Other Product Information:

% Volatile by Volume: 0.05 % Volatile by Weight: 0.03 % Solids by volume: 99.95 % Solids by Weight: 99.97

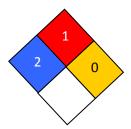
VOC CONTENT:

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

HMIS RATING

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

NFPA CODES



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