

P004-GR16 ANSI#61 GRAY

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: P004-GR16 ANSI#61 GRAY **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.

H317 May cause an allergic skin reaction.

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.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Weight %	CAS Number
Titanium Dioxide	5% - 10%	13463-67-7
Aluminum Oxide	<1%	1344-28-1
Crystalline Silica	0.10% - 0.50%	14808-60-7

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.



SAFETY DATA SHEET

ISSUED: 8/22/2018 REFERENCE: GR16-P004

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

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)					
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			
Limestone(1317-65-3)	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	TWA (Time Weighted Average)	15 mg/m3 (Total Dust) 8 hour			
LImit)					
NIOSH REL (Recommende Exposure	TWA (Time Weighted Average)	5 mg/m3 (Respirable Fraction) 8			
LImit)		hours			
Titanium Dioxide(13463-67-7)					
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	:	1.6839
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

AL : 0 :1 (12.14.20.1)	
Aluminum Oxide(1344-28-1)	10.000 #
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
Specific target organ toxicity - single	No data available
exposure	
Specific target organ toxicity - repeated exposure	No data available
Aspiration hazard	No data available
Additional information	Cough, chest pain, difficulty in breathing, gastrointestinal disturbance
Addittional information	Liver irregularities based on human evidence
Amorphous Silica(112926-00-8)	Errer irregularities based on naman evidence
Acute toxicity	no data available
Acute toxicity: Inhalation	no data available
Acute toxicity: Inhalation 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	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)	Storinger irregularities based on Haman evidence
Acute toxicity - inhalation	No data available
Acute toxicity - Initialation 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	No reported data
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 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 exposure	No data available
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)	Storrach irregularities based on number 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 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 to 0.1% is identified as a known or anticipated carcinogen by NTP
OSHA	No component of this product present at levels greater than 0.1% is 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, 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
Reproductive toxicity	no data avaliable



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	
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 related to its carcinogenic potential.
Additional information	Liver - 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
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 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
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 Specific target organ toxicity - single	No data available No data available
exposure Specific target organ toxicity - repeated exposure	No data available
Aspiration hazard	No data available
Titanium Dioxide(13463-67-7)	וייט עמנמ מיימוומטוכ
Acute toxicity - LD50 - oral - rat	> 10000 mg/kg
Acute toxicity - LD30 - Oral - Tat Acute toxicity - inhalation	> 10000 mg/kg No data available
Acute toxicity - Illianation 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
respiration of skill 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	
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	Does not cause skin sensitization
pig	
Germ cell mutagenicity -Ames test	Negative
(micronucleus test) - male and femae	
hamster	
Carcinogenicity - oral - male and female	No adverse effect has been observed in chronic toxicity tests
rat	
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
ACCIL	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
OCHA	0.1% is identified as a known or anticipated carcinogen
OSHA	No component of this product present at levels greater than or equal to
Denue di sative hevieite	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	No data available
exposure	No data available
Specific target organ toxicity - repeated	No data available
exposure	Deposited deep toyicity, well-pand female, and No-discount
Additional information	Repeated dose toxicity - rat - male and female - oral - No observed
Additional information	adverse effect level - >/ 1000 mg/kg
Additional information	No adverse effect has been observed in chronic toxicity tests

12. ECOLOGICAL INFORMATION

Aluminum Oxide(1344-28-1)	
Toxicity	No toxicity at the limit of solubility
Persisitence 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.
Amorphous Silica(112926-00-8)	
Toxicity	no data available



Persistence and degradability Bioaccumulative potential Mobility in soil Personal of the second control of the		
Mobility in soil Persistence and degradability No data available Bioaccumulative potential Mobility in soil No data available PET and vPvB No data available No data available No data available PET and vPvB No data available No data available No data available PET and vPvB No data available No data available PET and vPvB No data available No data available No data available PET and vPvB No data available PET and vPvB No data available No data av	Persistence and degradability	no data available
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PBT and vPvB Britm Sulfder(2727-43-7) Toxicity Persistence and degradability Mobility in soil Mobility in soil Persistence and degradability Persistence and degradability Bioaccumulative potential Mobility in soil Mobility in soil No data available Mobility in soil No data available PET and vPvB Carbon Black(1333-86-4) ECSO Toxicity to fish LSO ECSO Toxicity to daphnia and other aquatic Desmodesmus subspicatus (green algae > 10,000 mg/l - 24 h (OECD Test Guideline 201) Persistence and degradability Bioaccumulative potential Mobility in soil No data available Mobility in soil No data available PBT and vPvB Sassessment No data available No data available PBT and vPvB Sassessment No data available Robolity in soil Robolity of son LicoSo - Dephnia magna (water flea) Robolity in soil R	Mobility in soil	no data available
Toxicity Persistence and degradability are not applicable in inorganic substances Bioaccumulative potential Mobility in soil No data available PBT and VPVB not available/floor required Carbon Black(1333-86-4) Toxicity to fish I.C50 Danio rerio (zebra fish) > 1000 mg/l - 96 h ECSO Toxicity to daphnia and other aquatic invertebrates ECSO Toxicity to algae Desmodesmus subspicatus (green algae > 10,000 mg/l - 72 h (OECD Test Guideline 202) Persistence and degradability No data available Bioaccumulative potential No data available Bioaccumulative potential No data available Bioaccumulative potential No data available Persistence and degradability no data available Robility in soil No data available Bioaccumulative potential No information reported Bioaccumulative potential No information available Bioaccumulative potential No information available Bentaerythriot daphnia and other aquatic invertebrates - immobilization ECSO - daphnia magna (water fiea) Toxicity to algae - static ECSO - bophnia magna Water fiea) Toxicity to daphnia and other aquatic invertebrates - ECSO - Dapphnia magna (water fiea) Toxicity to daphnia and other aquatic invertebrates - ECSO - Dapphnia magna (water fiea) Toxicity to daphnia and other aquatic invertebrates - ECSO - Dapphnia magna (water fiea) Toxicity to daphnia and other aquatic invertebrates - ECSO - Dapphnia magna Toxicity to daphnia and other aquatic invertebrates - EC	PBT and vPvB	not available/not required
Toxicity Persistence and degradability are not applicable in inorganic substances Bioaccumulative potential Mobility in soil No data available PBT and VPVB not available/floor required Carbon Black(1333-86-4) Toxicity to fish I.C50 Danio rerio (zebra fish) > 1000 mg/l - 96 h ECSO Toxicity to daphnia and other aquatic invertebrates ECSO Toxicity to algae Desmodesmus subspicatus (green algae > 10,000 mg/l - 72 h (OECD Test Guideline 202) Persistence and degradability No data available Bioaccumulative potential No data available Bioaccumulative potential No data available Bioaccumulative potential No data available Persistence and degradability no data available Robility in soil No data available Bioaccumulative potential No information reported Bioaccumulative potential No information available Bioaccumulative potential No information available Bentaerythriot daphnia and other aquatic invertebrates - immobilization ECSO - daphnia magna (water fiea) Toxicity to algae - static ECSO - bophnia magna Water fiea) Toxicity to daphnia and other aquatic invertebrates - ECSO - Dapphnia magna (water fiea) Toxicity to daphnia and other aquatic invertebrates - ECSO - Dapphnia magna (water fiea) Toxicity to daphnia and other aquatic invertebrates - ECSO - Dapphnia magna (water fiea) Toxicity to daphnia and other aquatic invertebrates - ECSO - Dapphnia magna Toxicity to daphnia and other aquatic invertebrates - EC	Barium Sulfate(7727-43-7)	
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invertebrates - ECO - Daphnia magna (water flea) Persistence and degradability Bioaccumulative potential Mobility in soil PBT and vPbV Not available/not required Other adverse effects Tris(2,4-ditert-butylphenyl) phosphite(31570-04-4) Toxicity to fish - static LCO - zebra fish Toxicity to daphnia and other aquatic invertebrates - static EC50 - Daphnia magna Toxicity to algae - static EC50 - > 75 mg/L / 72 h		
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(water flea) Persistence and degradability Bioaccumulative potential Mobility in soil PBT and vPbV Not available/not required Other adverse effects Tris(2,4-ditert-butylphenyl) phosphite(31570-04-4) Toxicity to fish - static LC0 - zebra fish Toxicity to daphnia and other aquatic invertebrates - static EC50 - Daphnia magna Toxicity to algae - static EC50 - > 75 mg/L / 72 h		
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 Toxicity to algae - static EC50 - > 75 mg/L / 72 h	(water flea)	
Mobility in soil 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 Toxicity to daphnia and other aquatic invertebrates - static EC50 - Daphnia magna Toxicity to algae - static EC50 - > 75 mg/L / 72 h		
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 Toxicity to algae - static EC50 - > 75 mg/L / 72 h	Bioaccumulative potential	
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 Toxicity to algae - static EC50 - > 75 mg/L / 72 h		
Tris(2,4-ditert-butylphenyl) phosphite(31570-04-4) Toxicity to fish - static LC0 - zebra fish Toxicity to daphnia and other aquatic invertebrates - static EC50 - Daphnia magna Toxicity to algae - static EC50 - > 75 mg/L / 72 h		Not available/not required
Toxicity to fish - static LC0 - zebra fish Toxicity to daphnia and other aquatic invertebrates - static EC50 - Daphnia magna Toxicity to algae - static EC50 - > 75 mg/L / 72 h		
Toxicity to daphnia and other aquatic invertebrates - static EC50 - Daphnia magna Toxicity to algae - static EC50 - > 75 mg/L / 72 h		
Toxicity to daphnia and other aquatic invertebrates - static EC50 - Daphnia magna Toxicity to algae - static EC50 - > 75 mg/L / 72 h	Toxicity to fish - static LC0 - zebra fish	
invertebrates - static EC50 - Daphnia magna Toxicity to algae - static EC50 - > 75 mg/L / 72 h	Toxicity to daphnia and other aquatic	
magna Toxicity to algae - static EC50 - > 75 mg/L / 72 h		
	magna	
Scenedesmus subspicatus		> 75 mg/L / 72 h
	Scenedesmus subspicatus	



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.



SAFETY DATA SHEET

ISSUED: 8/22/2018 REFERENCE: GR16-P004

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
Aluminum Oxide	1344-28-1
Crystalline Silica	14808-60-7

SARA 313: No SARA 313 chemicals are present

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
^Crystalline Silica	14808-60-7

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

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 <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 WWWPROP65.CA.GOV.

Massachusetts Right to Know

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

Pennsylvania Right to Know

This product contains	Chemical CAS#
Limestone	1317-65-3
Barium Sulfate	7727-43-7
Titanium Dioxide	13463-67-7
Amorphous Silica	112926-00-8
Pentaerythritol tetrakis	6683-19-8
Aluminum Oxide	1344-28-1
Tris(2,4-ditert-butylphenyl) phosphite	31570-04-4
Crystalline Silica	14808-60-7
Carbon Black	1333-86-4



New Jersey Right to Know

This product contains	Chemical CAS#
Limestone	1317-65-3
Barium Sulfate	7727-43-7
Titanium Dioxide	13463-67-7
Amorphous Silica	112926-00-8
Pentaerythritol tetrakis	6683-19-8
Aluminum Oxide	1344-28-1
Tris(2,4-ditert-butylphenyl) phosphite	31570-04-4
Crystalline Silica	14808-60-7
Carbon Black	1333-86-4



RDINAL SAFETY DATA SHEET

ISSUED: 8/22/2018 REFERENCE: GR16-P004

16. OTHER INFORMATION

Other Product Information:

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

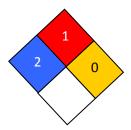
VOC CONTENT:

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

HMIS RATING

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

NFPA CODES



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