# C241-BL210 BLUE

## 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** C241-BL210 BLUE
**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 | 1% - 5% | 13463-67-7 |
| Hydrated magnesium silicate | 1% - 5% | 14807-96-6 |
| Carbon Black | 0.10% - 0.50% | 1333-86-4 |
| 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.

**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 Pyrogenic Silica(112945-52-5) | | |
| 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 Limit) | TWA (Time Weighted Average) | 3.5 mg/m3 8 hours |
| NIOSH REL (Recommended Exposure Limit ) | TWA (Time Weighted Average) | 0.1mg of PAHs/cm3 10 hours |
| Crystalline Silica(14808-60-7) | | |
| ACGIH TLV (Threshold Limit Value) | TWA (Time Weighted Average) | 0.025 mg/m3 8 hours |
| Diethanolamine(111-42-2) | | |
| ACGIH TLV (Threshold Limit Value) | TWA (Time Weighted Average) | 1.0 mg/m3 8 hours |
| NIOSH REL (Recommended Exposure Limit) | TWA (Time Weighted Average) | 15 mg/m3 8 hours |
| NIOSH REL (Recommended Exposure Limit) | TWA (Time Weighted Average) | 3 ppm 8 hours |
| Hydrated magnesium silicate(14807-96-6) | | |
| ACGIH TLV (Threshold Limit Value) | TWA (Time Weighted Average) | 2 mg/m3 (Respirable Fraction) 8 hours |
| NIOSH REL(Recommended Exposure Limit) | TWA (Time Weighted Average) | 2 mg/m3 (Respirable Fraction) 10 hours |
| 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 |
| 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** | **:** | 1.6679 |
| **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

| Aluminum Oxide(1344-28-1) | |
|---|---|
| Acute toxicity - LD50 - oral - rat | > 10,000 mg/kg |
| Acute toxicity - LC50 - inhalation - rat | > 2.6 mg/L / 4 h |
| Acute toxicity - dermal | No data available |
| Skin irritation - rabbit | No skin irritation |
| Eye irritation - rabbit | No eye irritation |
| Respiratory or skin sensitisation - maximisation test - guinea pig | DId not cause sensitisation on laboratory animals |
| Germ cell mutagenicity | No data available |
| Carcinogenicity | This product is or contains a component that is not classifiable as to its 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 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 |
| Addittional information | Liver irregularities based on human evidence |
| 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 | Body fluid assay |
| Germ cell mutagenicity - rat | Unscheduled DNA synthesis |
| Carcinogenicity - Rat - Inhalation | Tumorigenic: Carcinogenic by RTECS criteria. Lungs, thorax, or 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 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 |
| Additional information | Stomach 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 - 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 - micronucleus test | No reported data |
| Carcinogenicity - rat - intrapleural - tumorigenic | Equivocal tumorigenic agent by RTECS criteria. Lungs, Thorax, or 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 exposure | No data available |
| 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) | |
| 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 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 |
| 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 related to its carcinogenic potential. |
| Additional information | Liver - Irregularities - based on human evidence |

| Diethanolamine(111-42-2) | |
|---|---|
| LD50 Oral - Rat - male and female | 1,600 mg/kg (OECD Test Guideline 401) |
| LD50 Dermal - Rabbit | 12,200 mg/kg |
| LD50 Intraperitoneal - Rat | 120 mg/kg |
| LD50 Intravenous - Rat | 778 mg/kg |
| Skin Corrosion/irritation | No data available |
| Serious eye damage/eye irritation | Rabbit - Risk of serious damage to eyes (OECD Test Guideline 405) |
| Respiratory or skin sensitization | Guinea pig - Did not cause sensitization on laboratory animals |
| Germ cell mutagenicity | Micronucleus test lymphocyte - Result Negative |
| Mutagenicity (micronucleus test) Mouse male and female | Result: Negative |
| Carcinogenicity - IARC | 2B - Group 2B Possibly carcinogenic to humans |
| Carcinogenicity - NTP | No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP |
| Carcinogenicity - OSHA | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA |
| Reproductive toxicity | No data available |
| Specific target organ toxicity - single exposure | No data available |
| Specific target organ toxicity - repeated exposure | No data available |
| Aspiration hazard | No data available |
| Additional information | Repeated dose toxicity - rat - male and female - oral Lowest observed adverse effect level - 25 mg/kg RTECS: KL297500 |
| Additional information | To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated |
| Additional information | Liver - Irregularities - Based on Human Evidence |
| 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 | No ata available |
| Germ cell mutagenicity | No data available |
| Carcinogenicity - rat - inhalation | Equivocal tumorigenic agent by RTECS criteria. Lungs, thorax, or respiration: Tumors |
| IARC | Group 3: Not classifiable as to its carcinogenicity to humans |
| NTP | No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP |
| OSHA | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA |
| Reproductive toxicity | No data available |
| Specific target organ toxicity - single exposure | No data available |
| Specific target organ toxicity - repeated exposure | No data available |
| Aspiration hazard | No data available |
| Additional information | To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated |
| Additional information | Stomach 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 pig | Does not cause skin sensitization |
| Germ cell mutagenicity - Ames test - S. typhimurium | Negative |
| Mutagenicity - micronucleus test - male and female hamster | Negative |
| IARC carcinogenicity | No component of this product present at levels greater than or equal to 0.1% is identified as a probable, possible, or confirmed human carcinogen by IARC |
| ACGIH | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH |
| NTP | No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP |
| OSHA | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA |
| Reproductive toxicity | No data available |
| Specific target organ toxicity - single exposure | No data available |
| Specific target organ toxicity - repeated exposure | No data available |
| Aspiration hazard | No data available |
| Phthalocyanine Blue(147-14-8) | |
| Acute toxicty - LD50 - oral - male and female rat | > 2000 mg/kg |
| Acute toxicity - Inhalation | No data available |
| Acute toxicity - dermal - male and female rat | > 5000 mg/kg |
| Skin irritation - rabbit | No skin irritation - 4h |
| Eye irritation - rabbit | No eye irritation - 24 h |
| Respiration or skin sensitization - maximisation test - guinea pig | Does not cause skin sensitisation |
| Germ cell mutagenicity - hamster - fibroblast | Negative |
| Germ cell mutagenicity - Ames test - S. typhimurium | Negative |
| Germ cell mutagenicity - male and female mouse | Negative |
| Germ cell mutagenicity | Mutation in mammalian somatic cells |
| 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 pressent 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 | Repeated dose toxicity - male and female rat - oral - no observed adverse effect level - 1000 mg/kg |
| Titanium Dioxide(13463-67-7) | |
| Acute toxicity - LD50 - oral - rat | > 10000 mg/kg |
| Acute toxicity - inhalation | No data available |
| Acute toxicity - LD50 - dermal - rabbit | > 10000 mg/kg |
| Skin irritation - human | Mild skin irritation - 3 h |
| Eye irritation - rabbit | No eye irritation |
| Respiration or skin sensitisation | Will not occur |
| Germ cell mutagenicity - hamster - ovary - micronucleus test | No results available |
| Germ cell mutagenicity - hamster - lungs | DNA inhibition |

| | |
|---|---|
| Germ cell mutagenicity - hamster - ovary - sister chromatid exchange | No results available |
| Germ cell mutagenicity - mouse - micronucleus test | No results available |
| IARC | No component of this product present at levels greater than or equal to 0.1% is identified as a probable, possible or confirmed human carcinogen by IARC |
| NTP | No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen |
| OSHA | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA |
| Reproductive toxicity | No data available |
| Specific target organ toxicity - single exposure | No data available |
| Specific target organ toxicity - repeated exposure | No data available |
| Aspiration hazard | No data available |
| Additional information | To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated |
| Tris(2,4-ditert-butylphenyl) phosphite(31570-04-4) | |
| LD50 - oral - male and female rat - Acute Toxicity | > 6000 mg/kg |
| LD50 - dermal - male and female rat | > 2000 mg/kg |
| Skin irritation - rabbit | No skin irritation / 24 h |
| Eye irritation- rabbit | No eye irritation / 30 s |
| Respiratory or skin sensitization - guinea pig | Does not cause skin sensitization |
| Germ cell mutagenicity -Ames test (micronucleus test) - male and femae hamster | Negative |
| Carcinogenicity - oral - male and female rat | No adverse effect has been observed in chronic toxicity tests |
| IARC | No component of this product present at levels greater than or equal to 0.1% is identified as a probable, possible, or confirmed human carcinogen by IARC |
| ACGIH | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH |
| NTP | No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen |
| OSHA | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential 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 exposure | No data available |
| Additional information | Repeated dose toxicity - rat - male and female - oral - No observed adverse effect level - >/ 1000 mg/kg |
| Additional information | No adverse effect has been observed in chronic toxicity tests |

## 12. ECOLOGICAL INFORMATION

| | |
|---|---|
| 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 Pyrogenic Silica(112945-52-5) | |
| Toxicity | No data available |
| Persistence and degradability | No data available |
| Bioaccumulative potential | No data available |
| Mobility in soil | No data available |

| | |
|---|---|
| PBT and vPvB | not available/not required |
| Amorphous Silica(112926-00-8) | |
| Toxicity | no data available |
| Persistence and degradability | no data available |
| Bioaccumulative potential | no data available |
| Mobility in soil | no data available |
| PBT and vPvB | not available/not required |
| Barium Sulfate(7727-43-7) | |
| Toxicity | No data available |
| Persistence and degradability | The methods for determining biodegradability are not applicable in inorganic substances |
| Bioaccumulative potential | No data available |
| Mobility in soil | No data available |
| PBT and vPvB | not available/not required |
| Carbon Black(1333-86-4) | |
| Toxicity to fish LC50 | Danio rerio (zebra fish) >1000 mg/l - 96 h |
| EC50 Toxicity to daphnia and other aquatic invertebrates | Daphnia magna (Water flea) > 5600 mg/l - 24 h (OECD Test Guideline 202) |
| EC50 Toxicity to algae | Desmodesmus subspicatus (green algae > 10,000 mg/l - 72 h (OECD Test Guideline 201) |
| Persistence and degradability | No data available |
| Bioaccumulative potential | No data available |
| Mobility in soil | No data available |
| PBT and vPvB assessment | Not available/not required |
| Crystalline Silica(14808-60-7) | |
| Toxicity | no data available |
| Persistence and degradability | no data available |
| Bioaccumulative potential | no data available |
| Mobility in soil | no data available |
| PBT and vPvB | not available/not required |
| Diethanolamine(111-42-2) | |
| Toxicity to fish | LC50 - Pimephales promelas (fathead minnow) - 1,460 mg/l - 96h |
| Toxicity to daphnia and other aquatic invertebrates | static test EC50 - Daphnia magna (Water Flea) - 30.1 mg/l - 48h |
| Persistence and degradability | Biodegradability - aerobic - Exposure time 28d - Result: 93% Readily biodegradable ( OECD Test Guideline 301F) |
| Bioaccumulative potential | No data available |
| Mobility in Soil | No data available |
| Results of PBT and vPvB assessment | PBT/vPvB assessment not available as chemical safety assessment not required/not conducted |
| Other adverse effects | An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life with long lastting effects |
| Hydrated magnesium silicate(14807-96-6) | |
| Toxicity | No data available |
| Persistence and degradability | No data available |
| Bioaccumulative potential | No data available |
| Mobility in soil | No data available |
| PBT and vPvB | Not available/not required |
| Limestone(1317-65-3) | |
| Ecotoxicity | No data available |
| Environmental | No information reported |
| Physical | No information available |
| Pentaerythritol tetrakis(6683-19-8) | |
| Toxicity to fish - static LC50 - zebra fish | > 100 mg/L / 96 h |
| Toxicity to daphnia and other aquatic invertebrates - immobilization EC50 - daphnia magna (water flea) | > 86 mg/L / 24 h |
| Toxicity to algae - static EC50 - Scenedesmus subspicatus | > 100 mg/L / 72 h |
| Toxicity to bacteria - respiration inhibition IC50 - sludge treatment | > 100 mg/L / 3 h |
| Persistence and degradability - biodegradability - aerobic | 5% - not biodegradable : exposure time - 28 d |
| Bioaccumulative potential | No data available |
| Mobility in soil | No data available |
| PBT and vPvB | Not available/not required |

| | |
|---|---|
| Other adverse effects | No data available |
| Phthalocyanine Blue(147-14-8) | |
| Toxicity to fish - mortality LC50 - zebra fish | > 100 mg/L / 96 h |
| Toxicity to fish - mortality LC50 - carp | > 100 mg/L / 96 h |
| Toxicity to daphnia and other aquatic invertebrates - immobilization EC50 - Daphnia magna (water flea) | > 500 mg/L / 48 h |
| Toxicity to algae - static EC50 - green algae | > 100 mg/L / 72 h |
| Toxicity to bacteria - respiration inhibition - EC50 - sludge treatment | > 10000 mg/L / 3h |
| Persistence and degradability - biodegradability - aerobic | 5% - not biodegradable - exposure time: 28 d |
| Bioaccumulative potential | No data available |
| Mobility in soil | No data available |
| PBT and vPvB | Not available/not required |
| 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.

## 14. TRANSPORT INFORMATION

***CHECK WITH YOUR CARRIER FOR ADDITIONAL RESTRICTIONS THAT MAY APPLY.**

**USDOT GROUND**
**DOT (DEPARTMENT OF TRANSPORTATION)**
**PROPER SHIPPING NAME (DOT) :** Not Regulated/Not Applicable
**HAZARDS CLASS :** None
**UN/NA NUMBER :** Not Applicable
**PACKING GROUP :** None
**EMERGENCY RESPONSE GUIDE (ERG) :** Not Applicable

**IATA (AIR)**
**DOT (INTERNATIONAL AIR TRANSPORTATION ASSOCIATION)**
**PROPER SHIPPING NAME :** Not Regulated/Not Applicable
**HAZARDS CLASS :** Not Applicable
**UN/NA NUMBER :** Not Applicable
**PACKING GROUP :** Not Applicable
**EMERGENCY RESPONSE GUIDE (ERG) :** Not Applicable

**IMDG (OCEAN)**
**PROPER SHIPPING NAME :** Not Regulated , Not Applicable
**HAZARDS CLASS :** Not Applicable
**UN/NA NUMBER :** Not Applicable
**PACKING GROUP :** Not Applicable
**EMERGENCY RESPONSE GUIDE (ERG) :** Not Applicable

**MARINE POLLUTANT :** No
**SPECIAL PRECAUTIONS :** P235 Keep cool.

## 15. REGULATORY INFORMATION

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

**OSHA HAZARDS :** 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 |
| Hydrated magnesium silicate | 14807-96-6 |
| Carbon Black | 1333-86-4 |
| 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 |
| ~Carbon Black | 1333-86-4 |
| ^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 |
| *Hydrated magnesium silicate | 14807-96-6 |
| *Carbon Black | 1333-86-4 |
| *Crystalline Silica | 14808-60-7 |
| *Diethanolamine | 111-42-2 |

**Proposition 65 Key**

* **WARNING:** This product can expose you to a chemical(s), including those listed above, which is (are) known to the State of California to cause cancer.
For more information visit WWWPROP65.CA.GOV.

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

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

**Massachusetts Right to Know**

| This product contains | Chemical CAS# |
|---|---|
| Barium Sulfate | 7727-43-7 |
| Limestone | 1317-65-3 |
| Titanium Dioxide | 13463-67-7 |
| Hydrated magnesium silicate | 14807-96-6 |
| Amorphous Silica | 112926-00-8 |
| Carbon Black | 1333-86-4 |
| Crystalline Silica | 14808-60-7 |
| Aluminum Oxide | 1344-28-1 |
| Diethanolamine | 111-42-2 |

**Pennsylvania Right to Know**

| This product contains | Chemical CAS# |
|---|---|
| Barium Sulfate | 7727-43-7 |
| Limestone | 1317-65-3 |
| Titanium Dioxide | 13463-67-7 |
| Hydrated magnesium silicate | 14807-96-6 |
| Amorphous Silica | 112926-00-8 |
| Carbon Black | 1333-86-4 |
| Pentaerythritol tetrakis | 6683-19-8 |
| Crystalline Silica | 14808-60-7 |
| Aluminum Oxide | 1344-28-1 |
| Tris(2,4-ditert-butylphenyl) phosphite | 31570-04-4 |
| Amorphous Pyrogenic Silica | 112945-52-5 |
| Diethanolamine | 111-42-2 |

**New Jersey Right to Know**

| This product contains | Chemical CAS# |
|---|---|
| Barium Sulfate | 7727-43-7 |
| Limestone | 1317-65-3 |
| Titanium Dioxide | 13463-67-7 |
| Hydrated magnesium silicate | 14807-96-6 |
| Phthalocyanine Blue | 147-14-8 |
| Amorphous Silica | 112926-00-8 |
| Carbon Black | 1333-86-4 |
| Pentaerythritol tetrakis | 6683-19-8 |
| Crystalline Silica | 14808-60-7 |
| Aluminum Oxide | 1344-28-1 |
| Tris(2,4-ditert-butylphenyl) phosphite | 31570-04-4 |
| Amorphous Pyrogenic Silica | 112945-52-5 |
| Diethanolamine | 111-42-2 |

## 16. OTHER INFORMATION

**Other Product Information:**

| | | | |
|---|---|---|---|
| % Volatile by Volume : | 0.02 | % Volatile by Weight : | 0.01 |
| % Solids by volume : | 99.98 | % Solids by Weight : | 99.99 |

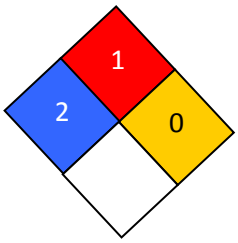
**VOC CONTENT:**

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

**HMIS RATING**

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

**NFPA CODES**

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