

**E311-BK04 BLACK****1. PRODUCT AND COMPANY IDENTIFICATION**

**PRODUCT NAME:** E311-BK04 BLACK  
**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 :**

H317 May cause an allergic skin reaction.  
H351 Suspected of causing cancer.  
H372 Causes damage to organs through prolonged or repeated exposure.

**PRECAUTIONARY STATEMENTS :**

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

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

| Chemical Name | Weight % | CAS Number |
|---------------|----------|------------|
| Carbon Black  | 1% - 5%  | 1333-86-4  |

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

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

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

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



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

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

## 5. FIRE FIGHTING MEASURES

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

**UNSUITABLE EXTINGUISHING MEDIA:** Do not use heavy water stream.

**FIRE FIGHTING PROCEDURE:** Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering the environment.

Protection during firefighting: Firefighters should wear full protective gear. Do not enter fire area without proper protective equipment, including self-contained breathing apparatus with full face piece operated in pressure demand or other positive pressure modes.

**UNUSUAL FIRE AND EXPLOSION HAZARD:** This product is stable at normal handling and storage conditions.

## 6. ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES :** General measures: Remove ignition sources. Use special care to avoid static electric charges. No smoking.

**FOR NON-EMERGENCY PERSONNEL :** For non-Emergency procedures: Evacuate unnecessary personnel.

**FOR EMERGENCY RESPONDERS :** Protective equipment : Equip cleanup crew with proper protection. - Emergency procedures : Ventilate area.

**ENVIROMENTAL 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

|                                   |                             |  |
|-----------------------------------|-----------------------------|--|
| Carbon Black(1333-86-4)           |                             |  |
| ACGIH TLV (Threshold Limit Value) | TWA (Time Weighted Average) | 3 mg/m <sup>3</sup> 8 hours            |
| NIOSH REL (Recommended Exposure)  | TWA (Time Weighted Average) | 0.1mg of PAHs/cm <sup>3</sup> 10 hours |



|  |                             |                     |
|--|-----------------------------|---------------------|
| Limit )                                |                             |                     |
| NIOSH REL (Recommended Exposure Limit) | TWA (Time Weighted Average) | 3.5 mg/m3 8 hours   |
| OSHA PEL (Permissible Exposure Limit)  | TWA (Time Weighted Average) | 3.5 mg/m3 8 hours   |
| Crystalline Silica(14808-60-7)         |                             |                     |
| ACGIH TLV (Threshold Limit Value)      | TWA (Time Weighted Average) | 0.025 mg/m3 8 hours |
| Limestone(1317-65-3)                   |                             |                     |
| ACGIH                                  | Not Applicable              | Not Applicable      |

**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**

|                                  |   |                     |
|----------------------------------|---|---------------------|
| <b>Physical state</b>            | : | Solid               |
| <b>Melting point</b>             | : | 55 - 90 deg C       |
| <b>Flash point</b>               | : | No data available.  |
| <b>Lower explosion limit</b>     | : | 10 g/m <sup>3</sup> |
| <b>Upper explosion limit</b>     | : | 70 g/m <sup>3</sup> |
| <b>Density</b>                   | : | 1.5487              |
| <b>Solubility</b>                | : | No data available.  |
| <b>Autoignition temperature</b>  | : | No data available.  |
| <b>Decomposition temperature</b> | : | 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**

|  |   |
|--|---|
| Barium Sulfate(7727-43-7)                          |   |
| 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   |
| Acute toxicity - Dermal                            | No data available   |
| Acute toxicity - inhalation                        | 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  |
| Aspiration hazard                                  | No data available   |
| Carcinogenicity - rat - intrapleural - tumorigenic | Equivocal tumorigenic agent by RTECS criteria. Lungs, Thorax, or Respiration: Tumors  |
| Eye irritation                                     | No data available   |
| Germ cell mutagenicity - mouse - micronucleus test | No reported data  |



|  |   |
|--|---|
| 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   |
| Respiratory or skin sensation                      | No data available   |
| Skin irritation                                    | No data available   |
| Specific target organ toxicity - repeated exposure | No data available   |
| Specific target organ toxicity - single exposure   | No data available   |
| <b>Carbon Black(1333-86-4)</b>                     |   |
| Aspiration hazard                                  | No data available   |
| 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.   |
| DNA repair - Rat - Female                          | Negative  |
| Eye damage/irritation - Rabbit                     | No eye irritation, (OECD Test Guideline 405)  |
| Germ cell mutagenicity                             | Ames test, <i>S. typhimurium</i> , negative   |
| Hamster - Ovary                                    | Negative  |
| IARC   | 2B - Group 2B: Possibly carcinogenic to humans (carbon black)   |
| LD50 Dermal - Rabbit                               | > 3,000 mg/kg   |
| LD50 Inhalation - Rat                              | No data available   |
| LD50 Oral - Rat                                    | > 8,000 mg/kg, male and female, (OECD Test Guideline 401)   |
| 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  |
| Organ toxicity                                     | Specific target organ toxicity - repeated exposure: No data available   |
| Organ toxicity                                     | Specific target organ toxicity - single exposure: No data available   |
| 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   |
| Respiratory/skin sensitization - Guinea pig        | Did not cause sensitization on laboratory animals, (OECD Test Guideline 406)  |
| Skin corrosion/irritation                          | No skin irritation - 24 h, (OECD Test Guideline 404)  |
| <b>Crystalline Silica(14808-60-7)</b>              |   |
| 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   |
| Acute Dermal toxicity                              | no data available   |
| Acute Inhalation toxicity                          | no data available   |
| Additional information                             | Liver - Irregularities - based on human evidence  |
| 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. |
| Aspiration hazard                                  | no data available   |
| Carcinogenicity                                    | Limited evidence of carcinogenicity in human studies  |
| eye irritation                                     | no data available   |
| Germ cell mutagenicity                             | no data available   |
| IARC   | Group 1: Carcinogenic to humans (Quartz)  |
| 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   |



|   |   |
|---|---|
| Respiratory or skin sensation                                   | no data available   |
| Skin irritation   | no data available   |
| Specific target organ toxicity - repeated exposure - inhalation | may cause damage to organs through prolonged or repeated exposure |
| Specific target organ toxicity - single exposure                | no data available   |
| <b>Limestone(1317-65-3)</b>                                     |   |
| ACGIH, IARC, NTP, CA Prop 65                                    | Not listed  |
| Draize test, rabbit, eye  | 750 ug/24H severe   |
| Draize test, rabbit, skin                                       | 500 mg/24H moderate   |
| Epidemiology  | No information available  |
| Mutagenicity  | No information available  |
| Neurotoxicity   | No information available  |
| Oral, rat: LD50   | 6450 mg/kg  |
| Reproductive effects  | No information available  |
| Teratogenicity  | No information available  |

**12. ECOLOGICAL INFORMATION**

|  |   |
|--|---|
| <b>Barium Sulfate(7727-43-7)</b>                         |   |
| Bioaccumulative potential                                | No data available   |
| Mobility in soil   | No data available   |
| PBT and vPvB   | not available/not required  |
| Persistence and degradability                            | The methods for determining biodegradability are not applicable in inorganic substances |
| Toxicity   | No data available   |
| <b>Carbon Black(1333-86-4)</b>                           |   |
| Bioaccumulative potential                                | No data available   |
| EC50 Toxicity to algae                                   | Desmodesmus subspicatus (green algae > 10,000 mg/l - 72 h (OECD Test Guideline 201)     |
| EC50 Toxicity to daphnia and other aquatic invertebrates | Daphnia magna (Water flea) > 5600 mg/l - 24 h (OECD Test Guideline 202)                 |
| Mobility in soil   | No data available   |
| PBT and vPvB assessment                                  | Not available/not required  |
| Persistence and degradability                            | No data available   |
| Toxicity to fish LC50                                    | Danio rerio (zebra fish) >1000 mg/l - 96 h  |
| <b>Crystalline Silica(14808-60-7)</b>                    |   |
| Bioaccumulative potential                                | no data available   |
| Mobility in soil   | no data available   |
| PBT and vPvB   | not available/not required  |
| Persistence and degradability                            | no data available   |
| Toxicity   | no data available   |
| <b>Limestone(1317-65-3)</b>                              |   |
| Ecotoxicity  | No data available   |
| Environmental  | No information reported   |
| Physical   | No information available  |

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

Ecology - waste materials: Avoid release to the environment.

**14. TRANSPORT INFORMATION****\*CHECK WITH YOUR CARRIER FOR ADDITIONAL RESTRCITIONS 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

| <b>This product contains:</b> | <b>Chemical CAS#</b> |
|-------------------------------|----------------------|
| Carbon Black                  | 1333-86-4            |

**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**

| <b>This product contains:</b> | <b>Chemical CAS#</b> |
|-------------------------------|----------------------|
| #Carbon Black                 | 1333-86-4            |
| *Crystalline Silica           | 14808-60-7           |

**National Regulations Key**

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

**STATE REGULATIONS****CALIFORNIA PROPOSITION 65**

| <b>This product contains:</b> | <b>Chemical CAS#</b> |
|-------------------------------|----------------------|
| *Crystalline Silica           | 14808-60-7           |

**California Proposition 65 Key**

\*This product contains (a) chemical (s) known to the State of California to cause cancer.

#This product contains (a) chemical (s) known to the State of California to be carcinogenic.

+This product contains (a) chemical (s) known to the State of California to cause birth defects or other reproductive harm.

**Massachusetts Right to Know**



| <b>This product contains</b> | <b>Chemical CAS#</b> |
|------------------------------|----------------------|
| Limestone                    | 1317-65-3            |
| Barium Sulfate               | 7727-43-7            |
| Carbon Black                 | 1333-86-4            |
| Crystalline Silica           | 14808-60-7           |

**Pennsylvania Right to Know**

| <b>This product contains</b> | <b>Chemical CAS#</b> |
|------------------------------|----------------------|
| Limestone                    | 1317-65-3            |
| Barium Sulfate               | 7727-43-7            |
| Carbon Black                 | 1333-86-4            |
| Crystalline Silica           | 14808-60-7           |

**New Jersey Right to Know**

| <b>This product contains</b> | <b>Chemical CAS#</b> |
|------------------------------|----------------------|
| Limestone                    | 1317-65-3            |
| Barium Sulfate               | 7727-43-7            |
| Carbon Black                 | 1333-86-4            |
| Crystalline Silica           | 14808-60-7           |





**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 |

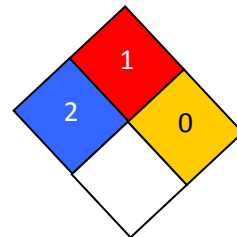
**VOC CONTENT:**

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

**HMIS RATING**

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

**NFPA CODES**



**MANUFACTURER DISCLAIMER :** The information contained in this Safety Data Sheet is considered to be true and accurate. Cardinal Paint and Powder makes no warranties, expressed or implied, as to the accuracy and adequacy of this information. This data is offered solely for the user's consideration, investigation and verification.