

T358-GR539 CHROME (40.LBS BXS)**1. PRODUCT AND COMPANY IDENTIFICATION**

PRODUCT NAME: T358-GR539 CHROME (40.LBS BXS)
PRODUCT USE: Industrial Powder Coating

MANUFACTURER

Cardinal Paint and Powder
1329 Potrero Ave
S. El Monte, CA, 91733
626 444-9274

24 HR. EMERGENCY TELEPHONE NUMBER

CHEMTREC (US Transportation): (800)424-9300
CHEMTREC (International Transportation): (202)483-7616
WEB: WWW.CARDINALPAINT.COM

2. HAZARDS IDENTIFICATION**PICTOGRAMS :**

SIGNAL WORD : DANGER

HAZARD STATEMENTS :

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

PRECAUTIONARY STATEMENTS :

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Weight %	CAS Number
1,3,5-Triglycidyl Isocyanurate	1% - 5%	2451-62-9

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

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

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

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

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

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

5. FIRE FIGHTING MEASURES

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

UNSUITABLE EXTINGUISHING MEDIA: Do not use heavy water stream.

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

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

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

6. ACCIDENTAL RELEASE MEASURES

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

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

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

ENVIRONMENTAL PRECAUTIONS : Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public water. Avoid release to the environment.

METHODS AND MATERIAL FOR CONTAINMENT AND CLEAN UP : On land, sweep or shovel into suitable containers,. Minimize generation of dust.

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when you are leaving work. Provide good ventilation in process area. Use only in well ventilated areas. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Eliminate all ignition sources if safe to do so. Avoid breathing dust, fumes and/or vapors.

Hygiene measures: Wash Skin thoroughly after handling.

CONDITIONS FOR SAFE STORAGE, INCLUDING INCOMPATIBILITIES : Avoid heat sources and direct sunlight. Store in a dry place. Protect from moisture. Keep container closed when not in use. Keep only in the original container in a cool well ventilated place away from heat, ignition sources and direct sunlight.

Incompatible products: Strong bases. Strong acids.

Incompatible materials: Source of ignition. Direct sunlight.

**8. EXPOSURE CONTROLS\PERSONAL PROTECTION**

1,3,5-Triglycidyl Isocyanurate(2451-62-9)		
ACGIH TLV (Threshold Limit Value)	TWA (Time Weighted Average)	0.05 mg/m ³ 8 hours
Amorphous Silica(112926-00-8)		
USA OSHA	USA OSHA TWA (Table Z-1)	6 mg/m ³
USA OSHA	USA OSHA TWA (Table Z-3)	20 Million particals per cubic foot.
USA NIOSH	USA NIOSH TWA (REL)	6 mg/m ³
Ethylene Glycol(107-21-1)		
ACGIH TLV (Threshold Limit Value)	ACGIH C (Ceiling)	100 mg/m ³

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	:	1.2091
Solubility	:	No data available.
Autoignition temperature	:	No data available.
Decomposition temperature	:	No data available.

10. STABILITY AND REACTIVITY**REACTIVITY :** This product is stable at normal handling and storage conditions.**CHEMICAL STABILITY :** Stable under normal conditions.**CONDITIONS TO AVOID :** Direct sunlight. Extremely high or low temperatures.**INCOMPATIBLE MATERIALS :** Avoid contact with strong oxidizing agents.**HAZARDOUS DECOMPOSITION PRODUCTS:** Fume. Carbon monoxide. Carbon dioxide.**11. TOXICOLOGICAL INFORMATION**

1,3,5-Triglycidyl Isocyanurate(2451-62-9)	
Acute toxicity - LD50 - oral - rat	100 - 200 mg/kg
Acute toxicity - LC50 - inhalation - rat - male - 4 h	> 650 mg/m ³
Acute toxicity - LD50 - Dermal - rat- male & female	> 2000 mg/kg
Skin irritation - rabbit	Mild skin irritation - 24 hours
Eye irritation - rabbit	Severe eye irritation
Respiratory or skin sensation - Maximization test - guinea pig	May cause sensitization by skin contact
Germ cell mutagenicity	In vivo tests showed mutagenic effects
Germ cell mutagenicity - AMES test - S. typhimurium	Positive



Germ cell mutagenicity - AMES test - mouse - male	Positive
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	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated
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
Ethylene Glycol(107-21-1)	
LD50 Oral - Rat - Acute toxicity	4,700 mg/kg, Oral- Rat
Inhalation	No data available.
LD50 Dermal - Rabbit	10,626 mg/kg, Dermal - Rabbit
Skin corrosion/irritation	Skin - Rabbit Result: No skin irritation
Serious eye damage/eye irritation	Eyes - Rabbit Result: Mild eye irritation - 24 h
Respiratory or skin sensitization	No data available.
Germ cell mutagenicity	No data available.
Carcinogenicity	This product is or contains a component that is probably not carcinogenic 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 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	Laboratory experiments have shown teratogenic effects. Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.
Specific target organ toxicity - single exposure	No data available.
Specific target organ toxicity - repeated	Oral - May cause damage to organs through prolonged or repeated exposure. - Kidney
Aspiration hazard	No data available.
Additional Information	RTECS: KW2975000 When ingested early symptoms mimic alcohol inebriation and are followed by nausea, vomiting, abdominal pain, weakness, muscle tenderness, respiratory failure, convulsions, cardiovascular collapse, pulmonary edema, hypocalcemic tetany, and severe metabolic acidosis. Without treatment, death may occur in 8 to 24 hours. Victims who survive the initial toxicity period usually develop renal failure along with brain and liver damage. Exposure to and/or consumption of alcohol may increase toxic effects. Central nervous system - Irregularities - Based on Human Evidence Central nervous system - Irregularities - Based on Human Evidence

12. ECOLOGICAL INFORMATION

1,3,5-Triglycidyl Isocyanurate(2451-62-9)	
Toxicity to fish - static test LC50 - danio rerio (zebra fish)	> 77 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates - Immobilization - EC50 - daphnia magna (water flea)	> 100 mg/l - 24 h
Toxicity to algae - growth inhibition - EC50 - Desmodesmus subspicatus	29 - 30 mg/l - 72 h
Toxicity to bacteria - Respiration inhibition - IC50 - Sludge Treatment	> 100 mg/l 3 h
Persistence and degradability - biodegradability - aerobic - exposure time: 44 d	0.5 - 1% - not biodegradable
Bioaccumulative potential	No data available
Mobility in soil	No data available
PBT & vPvB	not available/not required
Other adverse effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life with long lasting effects
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
Ethylene Glycol(107-21-1)	
LC50 - Oncorhynchus mykiss - toxicity to fish	18,500 mg/l - 96 h, Oncorhynchus mykiss (rainbow trout)
LC50 - Leuciscus idus	10,000 mg/l - 48 h, Leuciscus idus (Golden orfe)
NOEC - Pimephales promelas	32,000 mg/l - 7d, Pimephales promelas (fathead minnow)
NOEC - Pimephales promelas	39,140 mg/l - 96 h, Pimephales promelas (fathead minnow)
EC50 - Daphnia magna - Toxicity to daphnia and other aquatic invertebrates	74,000 mg/l - 24 h, Daphnia magna (Water flea)
EC50 - Daphnia magna -	24,000 mg/l - 48 h, Daphnia magna (Water flea)
LC50 - Daphnia magna -	41,000 mg/l - 48 h, Daphnia magna (Water flea)
Persistence and degradability	Ratio BOD/ThBOD 0.78 % 12.3
Bioaccumulative potential	Does not bioaccumulate. Bioaccumulation other fish - 61 d - 50 mg/l Bioconcentration factor (BCF): 0.60
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	No data available.

**13. DISPOSAL CONSIDERATIONS****WASTE TREATMENT METHODS**

GENERAL INFORMATION : No data available.

DISPOSAL METHOD: Dispose of in accordance with Local, State, Regional, National and International Regulations.

Ecology - waste materials: Avoid release to the environment.

14. TRANSPORT INFORMATION

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

USDOT GROUND**DOT (DEPARTMENT OF TRANSPORTATION)**

PROPER SHIPPING NAME (DOT) : Not Regulated/Not Applicable

HAZARDS CLASS : None

UN/NA NUMBER : Not Applicable

PACKING GROUP : None

EMERGENCY RESPONSE GUIDE (ERG) : Not Applicable

IATA (AIR)**DOT (INTERNATIONAL AIR TRANSPORTATION ASSOCIATION)**

PROPER SHIPPING NAME : Not Regulated/Not Applicable

HAZARDS CLASS : Not Applicable

UN/NA NUMBER : Not Applicable

PACKING GROUP : Not Applicable

EMERGENCY RESPONSE GUIDE (ERG) : Not Applicable

IMDG (OCEAN)

PROPER SHIPPING NAME : Not Regulated , Not Applicable

HAZARDS CLASS : Not Applicable

UN/NA NUMBER : Not Applicable

PACKING GROUP : Not Applicable

EMERGENCY RESPONSE GUIDE (ERG) : Not Applicable

MARINE POLLUTANT : No

SPECIAL PRECAUTIONS : P235 Keep cool.

**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#
1,3,5-Triglycidyl Isocyanurate	2451-62-9

SARA 313 : No SARA 313 chemicals are present

CLEAN AIR ACT :**INTERNATIONAL REGULATIONS****CLASSIFICATION ACCORDING TO REGULATION (EC) No. 1272/2008 (CLP) :**

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

NATIONAL REGULATIONS**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#
#Ethylene Glycol	107-21-1

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#
Amorphous Silica	112926-00-8
Ethylene Glycol	107-21-1

Pennsylvania Right to Know

This product contains	Chemical CAS#
Amorphous Silica	112926-00-8
Ethylene Glycol	107-21-1

New Jersey Right to Know

This product contains	Chemical CAS#
1,3,5-Triglycidyl Isocyanurate	2451-62-9
Amorphous Silica	112926-00-8
Ethylene Glycol	107-21-1



16. OTHER INFORMATION

Other Product Information:

% Volatile by Volume :	0.14	% Volatile by Weight :	0.13
% Solids by volume :	99.86	% Solids by Weight :	99.87

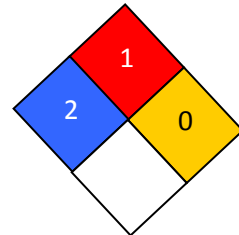
VOC CONTENT:

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.