

## SAFETY DATA SHEET



# CROWN ALLOYS COMPANY

## Section 1 – PRODUCT AND COMPANY IDENTIFICATION

<b>PRODUCT NAME:</b>	Cold-Galvanizing Zinc Primer in Aerosol Containers.
<b>PRODUCT IDENTIFICATION:</b>	CROWN-GALV (aerosol)
<b>SPECIFICATION:</b>	N/A
<b>RECOMMENDED USE:</b>	Sacrificial zinc-based protection that prevents rust and corrosion.
<b>SUPPLIER:</b>	Crown Alloys Company 30105 Stephenson Hwy. Madison Heights, MI. 48071
<b>TELEPHONE NUMBER:</b>	(248) 588-3790
<b>EMERGENCY NUMBER:</b>	Call CHEMTREC Day or Night 1-800-424-9300 / +1 703-527-3887
<b>WEBSITE:</b>	<a href="http://www.crownalloys.com">www.crownalloys.com</a>

## Section 2 – HAZARDS IDENTIFICATION

### 2.1 Classification of the mixture

This product is placed on the market in a pressurized container

#### 2.1.1 Classification in accordance with GHS-US

Aerosol 3	H229	STOT SE 3	H335
Press. Gas	H280	STOT SE 3	H336
Skin Irrit. 2	H315	Carc. 2	H351
Eye Irrit. 2A	H319	STOT RE 2	H373

### 2.2 Label elements

#### GHS-US labelling

#### Hazard Pictograms (GHS-US):



GHS04



GHS08



GHS07

#### Signal word (GHS-US):

Warning

#### Hazard statements (GHS-US):

H229 – Pressurized container: May burst if heated

H280 – Contains gas under pressure; may explode if heated

H315 – Causes skin irritation

H319 – Causes serious eye irritation

H335 – May cause respiratory irritation

H336 – May cause drowsiness or dizziness

H351 – Suspected of causing cancer

H373 – May cause damage to organs through prolonged or repeated exposure

#### Precautionary statements (GHS-US):

P260 – Do not breathe dust/fume/gas/mist/vapors/spray

P261 – Avoid breathing dust/fume/gas/mist/vapors/spray

P264 – Wash thoroughly after handling

P270 – Do not eat, drink or smoke when using this product

P271 – Use only outdoors or in a well-ventilated area

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

P302 + P352 – IF ON SKIN: Wash with plenty of soap and water

P304 + P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313 – IF exposed or concerned: Get medical advice/attention

P312 – Call a POISON CENTER or physician if you feel unwell

P314 – Get medical advice and attention if you feel unwell

P332 + P313 – If skin irritation occurs: Get medical advice/attention

P337 + P313 – If eye irritation persists: Get medical advice/attention

P362 – Take off contaminated clothing and wash before reuse

P403+P233 – Store in a well-ventilated place. Keep container tightly closed

P405 – Store locked up

P501- Dispose of contents/container in accordance with local / regional / national / international regulations

### 2.3 Other hazards

Caution: Contents under pressure

Aerosol: Do not puncture or incinerate. Do not expose to heat or store at temperatures above 120°F

### 2.4 Unknown acute toxicity (GHS-US)

No data available

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**Other hazards which do not result in GHS classification:**  
 (When product is used in conjunction with welding)

Electrical shock can kill.  
 Arc rays can injure eyes and burn skin.  
 Welding arc and sparks can ignite combustibles and flammable materials.  
 Overexposure to welding fumes and gases can be hazardous.  
 Read and understand the manufacturer's instructions, Safety Data Sheets and the precautionary labels before using these alloys. Refer to Section 8.

**Substance(s) formed under the conditions of use:**

Welding fumes may contain the following constituent(s) and/or their complex metallic oxides as well as solid particles or other constituents from the consumables, base metal, or base metal coating not listed below:

Chemical Identity	CAS-No.	Chemical Identity	CAS-No.	Chemical Identity	CAS-No.
Carbon Dioxide	124-38-9	Ozone	10028-15-6	Nitrogen Dioxide	10102-44-0
Carbon Monoxide	630-08-0				

**Section 3 – COMPOSITION / INFORMATION ON INGREDIENTS**

**3.1 Substances**

Not applicable

**Full text of H-phrases:** See section 16

**3.2 Mixture**

**Reportable Hazardous Ingredients:**

Chemical Identity	CAS-No.	Weight Percent (%)	GHS-US Classification
Methylene chloride (CH <sub>2</sub> Cl <sub>2</sub> )	75-09-2	65.0 min.	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Carc. 2, H351 STOT SE 3, H335 STOT SE 3, H336 STOT RE 2, H373
Propane	74-98-6	15.0 max.	Not classified
Zinc galvanize compound	7440-66-6	35.0 max.	Not classified

**Section 4 – FIRST AID MEASURES**

**4.1 Description of first aid measures**

**Ingestion:** Ingestion is unlikely. Should ingestion occur, do not induce vomiting. Drink several large glasses of water. Never give anything by mouth to an unconscious person. Seek medical attention immediately. **GHS: Category 4**

**Inhalation:** Remove to fresh air. If not breathing give artificial respiration. Seek medical attention.

**Skin Contact:** Should irritation occur, wash affected area with soap and water for 15 minutes. Apply a lotion. Launder clothing before reuse. If irritation persists, seek medical attention. **GHS: Category 2**

**Eye Contact:** Flush eyes with cool, clean water (low pressure) for at least 15 minutes. Hold eyelids apart to ensure complete irrigation of the eye and eyelid. If irritation persists seek medical attention. **GHS: Category 2A**  
 Arc rays can injure eyes. If exposed, move victim to a dark room, remove contact lenses and cover eyes with a padded dressing and rest. Obtain medical assistance if symptoms persist.

**4.2 Most important symptoms/effects, acute and delayed**

**Medical Conditions Aggravated by Exposure:** May aggravate existing eye, skin, or upper respiratory conditions (asthma).

**Symptoms/injuries after inhalation:** Excessive inhalation of **Crown-Galv** or its vapors can be harmful and may cause headache, dizziness, asphyxia, anesthetic effects and possible unconsciousness. Long term overexposure may cause neural dysfunction and elevated carboxyhemoglobin levels in the blood.

**Symptoms/injuries after skin contact:** Prolonged skin contact may cause dermatitis, drying and defatting of the skin. It may also cause redness, irritation and scaling of the skin.

**Symptoms/injuries after eye contact:** May cause stinging, redness, blurred vision and/or tears.

**Symptoms/injuries after ingestion:** Not an anticipated route of exposure during normal product handling (aerosol). However, ingestion may cause gastrointestinal discomfort, central nervous system depression, paresthesia, drowsiness, convulsions, conjunctivitis, pulmonary edema. Delayed effects may be irregular breathing, stomach/intestinal disorders, nausea, vomiting and/or increased liver enzymes. Prolonged or repeated ingestion may cause damage to the liver, blood and salivary gland.

**4.3 Indication of immediate medical attention and special treatment needed**

No additional information available

**Section 5 – FIRE-FIGHTING MEASURES**

**General Fire Hazards:**  
 (When product is used in conjunction with welding)

Welding arc and sparks can ignite combustibles and flammable products. Read and understand American National Standard Z49.1, "Safety In Welding, Cutting and Allied Processes" and National Fire Protection Association NFPA 51B, "Standard for Fire Prevention During Welding, Cutting and Other Hot Work" before using this product.

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**5.1 Extinguishing media**

**Suitable extinguishing media:** Use foam, dry chemical powder or carbon dioxide (CO<sub>2</sub>).  
**Unsuitable extinguishing media:** None

**5.2 Special hazards arising from the substance**

**Fire hazard:** Not flammable.  
**Explosion hazard:** Use a self-contained breathing apparatus. Use water fog to cool containers to prevent rupturing of containers. Aerosol cans may explode upon heating, spread fire and overcome sprinkler systems.

**5.3 Special protective equipment and precautions for firefighters**

**Special firefighting procedures:** Use standard firefighting procedures and consider the hazards of other involved materials.  
**Special protective equipment for firefighters:** Firefighters should wear full protective gear.

**Section 6 – ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures**

Wear the appropriate protective equipment as conditions warrant. Do not touch or walk through spilled material.

**6.2 Environmental precautions**

Avoid run off to waterways and sewers.

**6.3 Methods and material for containment and cleaning up**

Clean up spills immediately, observing precautions in the personal protective equipment in Section 8. Prevent product from entering any drains, sewers or water sources. Recover free liquid for recycle or disposal. Soak up remainder of the spill with absorbent material and dispose of properly.  
 For Large Spills: Keep unauthorized people from the area. Use self contained breathing apparatus. Dike the area and pump contents to a labeled, closed container. Absorb residue and sweep up. Place in a closed, labeled container. Dispose of properly.

**Section 7 – HANDLING AND STORAGE**

**7.1 Precautions for safe handling**

Wash hands thoroughly after handling. Empty aerosol cans may contain product residue which may exhibit hazards of product. Do not breath vapor or mist. Avoid contact of raw material with eyes, skin and clothing. Read and understand the manufacturer's instruction and the precautionary label on the product. See American National Standard Z49.1, "Safety In Welding, Cutting and Allied Processes" published by the American Welding Society, <http://pubs.aws.org> and OSHA Publication 2206 (29CFR1910), U.S. Government Printing Office, [www.gpo.gov](http://www.gpo.gov).

**7.2 Conditions for safe storage, including any incompatibilities**

Leave in the original shipping containers (aerosol cans). Store in a cool, dry place. Do not expose aerosol cans to temperatures above 120°F or the container may rupture. Store aerosol as Level 1 Aerosol (NFPA 30B). Store away from incompatible materials. Store in accordance with local/regional/national regulations.

**7.3 Specific end use(s)**

For welding consumables and related products

**Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION**

**8.1 Control parameters**

Chemical Identity (CAS-No.)	ACGIH TLV (TWA)	OSHA PEL (TWA)	NIOSH REL	NIOSH STEL
<b>Methylene chloride</b> (75-09-2)	12.5 ppm	25 ppm 125 ppm (STEL)	N/A	N/A
<b>Propane</b> (74-98-6)	1000 ppm	1000 ppm	N/A	N/A
<b>Zinc/zinc dust</b> (7440-66-6)	200 ppm	200 ppm	N/A	N/A

**8.2 Exposure controls**

**Appropriate Engineering Controls:** (When used in conjunction with welding)

Use enough ventilation, local exhaust at the arc, or both to keep the fumes and gases from the worker's breathing zone & the general area. Maintain exposures below acceptable exposure levels (see Section 8.1). Use industrial hygiene air monitoring to ensure that your use of this product does not create exposures that exceed the recommended exposure limits. Always use exhaust ventilation in user operations such as high temperature cutting, grinding, welding and brazing. Train the welder to keep his head out of the fume plume. Confined spaces require adequate ventilation and/or air supplied respirators. Read and understand the manufacturer's instructions and the precautionary label on the product. See American National Standard Z49.1, Safety in Welding, Cutting, and Allied Processes, published by the American Welding Society, 8669 Doral Blvd. Suite 130, Doral, FL 33166 and OSHA Publication 2206 (29CFR1910), US Government Printing Office, Washington, D.C. 20402 for more details on many of the following.

**Eye/face protection:** At a minimum, always wear safety glasses with side shields. Additional protection such as goggles, face shields or respirators may be required. Wear helmet or use face shield with filter lens shade number 12 or darker when engaging in any open arc processes. No specific lens shade recommendation for submerged arc processes. Shield others by providing screens & flash goggles.

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**Skin/Hand Protection:** Wear protective gloves. Chemically resistant gloves (neoprene, butyl or nitrile rubber) are recommended.

**Respiratory Protection:** Crown-Galv is usually used in conjunction with many different open arc processes which requires much more vigilant attention to the resulting fumes.

**General Respiratory Welding Controls:**

Keep your head out of fumes. Use enough ventilation and local exhaust to keep fumes and gases from your breathing zone and the general area. An approved respirator should be used unless exposure assessments are below applicable exposure limits. Use respirable fume respirator or air supplied respirator when welding in confined space or where local exhaust or ventilation does not keep exposure below TLV's (see Section 8.1). Use only NIOSH approved respirators in accordance with 29 CFR 1910.134 – Respiratory Protection. Oxygen levels below 19.5% are considered IDLH by OSHA. In such atmospheres, use of a full-facepiece pressure/demand SCBA or a full facepiece, supplied air respirator with auxiliary self-contained air supply is required under OSHA's Respiratory Protection Standard (1910.134-1998).

**Hygiene measures:** Do not eat, drink or smoke when using the product. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Cosmetics should not be applied in areas where exposures exist! Routinely wash work clothing and protective equipment to remove contaminants.

**Section 9 – PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	Dull silver aerosol
<b>Physical state</b>	Spray paint
<b>Color</b>	Dull silver
<b>Odor</b>	Chlorinated solvent odor until dry
<b>Specific gravity (H<sub>2</sub>O=1)</b>	Not established
<b>Water reactive</b>	Not established
<b>Flash point</b>	Not established
<b>Evaporation rate (BuAc=1)</b>	>1.00
<b>Boiling point</b>	Not established

<b>Flammability limit - upper (%)</b>	Not established
<b>Flammability limit - lower (%)</b>	Not established
<b>Vapor pressure</b>	47.33 KPa
<b>Vapor density (Air=1)</b>	Not established
<b>Solubility in water</b>	Not established
<b>Partition coefficient (n-octanol/water)</b>	Not established
<b>Auto-ignition temperature</b>	Not established
<b>Decomposition temperature</b>	Not established
<b>VOC content</b>	53.3% (by weight)

**Section 10 – STABILITY AND REACTIVITY**

**10.1 Reactivity**

This product is non-reactive under normal conditions of use, storage and transport.

**10.2 Chemical stability**

This product is stable under normal conditions.

**10.3 Possibility of hazardous reactions**

Will not occur.

**10.4 Conditions to avoid**

Avoid ignition sources, open flames, amines and strong bases.

**10.5 Incompatible materials**

None known.

**10.6 Hazardous decomposition products**

Use of the Crown-Galv as per label instructions does not by itself result in any hazardous decomposition products, however, Crown-Galv is usually used in conjunction with many different open arc processes. Please note the below likely hazardous decomposition products from general welding operations:

Welding fumes and gases can't be classified simply. The composition and quantity of both are dependent upon the metal being welded and the rods used. Coatings on the metal being welded (such as paint, plating, or galvanizing), the number of welders, the volume of the work area, the quality and the amount of ventilation, the position of the welder's head with respect to the gas plume, the presence of contaminants in the atmosphere (such as chlorinated hydrocarbon vapors from cleaning and degreasing activities), the process and procedures, as well as the welding consumables. Gaseous reaction products may include carbon monoxide and carbon dioxide. Ozone and nitrogen oxides may be formed by the radiation from an arc, in addition to the shielding gases like argon and helium, whenever they are employed.

**Section 11 – TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

**Ingestion:** Not an anticipated route of exposure during normal product handling (aerosol). However, ingestion may cause gastrointestinal discomfort, central nervous system depression, paresthesia, drowsiness, convulsions, conjunctivitis, pulmonary edema. Delayed effects may be irregular breathing, stomach/intestinal disorders, nausea, vomiting and/or increased liver enzymes. Prolonged or repeated ingestion may cause damage to the liver, blood and salivary gland.

**Inhalation:** Excessive inhalation of **Crown-Galv** or its vapors can be harmful and may cause headache, dizziness, asphyxia, anesthetic effects and possible unconsciousness. Long term overexposure may cause neural dysfunction and elevated carboxyhemoglobin levels in the blood.

**Skin Contact:** Prolonged contact will de-fat and dry skin to a point, persons with sensitive skin may experience mild to moderate redness of irritation.

**Eye contact:** May cause stinging, redness, blurred vision and/or tears.

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**Information on toxicological effects**

**Acute toxicity** (list all possible routes of exposure): Harmful if swallowed

<b>Specified substance: METHYLENE CHLORIDE</b> LD50 (oral, rat) > 2,000 mg/kg LC50 (inhalation, rat) = 52,000 mg/m <sup>3</sup> LD50 (dermal, rat) > 2,000 mg/kg (OECD Test Guideline 402)
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**Repeated dose toxicity (product):**

LD50 (oral, rat) = 1,500 – 2,500 mg/kg LC50 (inhalation, rat) = 10,000 ppm
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**Skin corrosion/irritation (product):** Not classified  
**Serious eye damage/irritation (product):** Not classified  
**Respiratory or skin sensitization (product):** May cause an allergic skin reaction  
**Germ cell mutagenicity (product):** Not classified

**Carcinogenicity (product):**

- NTP:** Reasonably anticipated to be a Human Carcinogen
- IARC:** Group 2B: Possibly carcinogenic to humans
- OSHA:** Specifically regulated carcinogen (Methylene chloride)

**Reproductive toxicity (product):** Not classified  
**Genetic Toxicity (product):** Negative results from animal studies  
**Specific target organ toxicity - single exposure (product):** Not classified  
**Specific target organ toxicity - repeated exposure (product):** Not classified  
**Aspiration hazard (product):** Not classified  
**Other Effects:** Not classified

**Symptoms related to the physical, chemical and toxicological characteristics under the condition of use:** Not classified

**Additional toxicological information under the conditions of use:**

**Acute toxicity:** Not classified

**Section 12 – ECOLOGICAL INFORMATION**

**Eco-toxicity:**

**Acute hazards to the aquatic environment:**

Fish

<b>Specified substance: METHYLENE CHLORIDE</b> LC50 (Fathead minnow (Pimephales promelas), 96 h): 193.00 mg/l NOEC (Sheepshead minnow (Cyprinodon variegatus), 96 h): 130.00 mg/l	<b>Specified substance: ZINC</b> LC50 (Rainbow trout, donaldson trout (Oncorhynchus mykiss), 96 h): 0.56 mg/l
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Aquatic Invertebrates

<b>Specified substance: METHYLENE CHLORIDE</b> EC50 (Water flea (Daphnia magna), 48 h): 1,682.00 mg/l	<b>Specified substance: ZINC</b> EC50 (Water flea (Daphnia magna), 48 h): 2.8 mg/l
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**Chronic hazards to the aquatic environment:**

**Fish (product):** Not classified

**Aquatic Invertebrates (product):**

EC50 (Water flea (Daphnia magna) Immobilization): 480.00 mg/l
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**Persistence and Degradability**

**Biodegradation (product):** 5 – 26% in 28 days

**Bioaccumulative Potential:** Not classified

**Mobility in Soil:** Potential for mobility in soil is high.

**Octanol/Water partition coefficient:** 1.25

**Organic carbon/Water partition coefficient:** 24

**Atmospheric half-life:** 79 – 110 days

**Other Adverse Effects:** None

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**Section 13 – DISPOSAL CONSIDERATIONS**

**Product Disposal Method:** Collect and reclaim or dispose in sealed containers at a licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Under RCRA, it is the responsibility of the user of the final product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This product should be disposed of in accordance with all applicable federal, state and local regulations.  
 Do not discard into any sewers, on the ground or into any bodies of water.

**Contaminated Container or Packaging:** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Dispose of spent aerosol cans and packaging in accordance with all federal, state, regional and/or local regulations.

**Section 14 – TRANSPORT INFORMATION**

In accordance with DOT / ADR / RID / ADNR / IMDG / ICAO / IATA

**14.1 UN number**

Not a dangerous good in sense of transport regulations

**14.2 UN proper shipping name**

Not applicable

**14.3 Additional information**

**TDG Shipping Information:**

**TDG Shipping Name:** Aerosols, Non flammable  
**UN number:** 1950  
**Hazard Class:** 2.2  
**Labeling:** Non-flammable gas  
**Packing Group:** None  
**Sub classification:** 6.1

**DOT HM-181 Shipping Information:**

**DOT Shipping Name:** Consumer commodity  
**Hazard Class or Division:** ORM-D (on shipping carton)  
**UN Number:** 1950  
**Packing Group:** III  
**Label(s) Required:** ORM-D (on shipping carton)

**Section 15 – REGULATORY INFORMATION**

**15.1 US Federal regulations**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

<b>Methylene chloride (75-09-2)</b>	<b>Zinc (7440-66-6)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on SARA Section 313 (Specific toxic chemical listings) Listed on SARA Section 311/312 Hazards	Listed on SARA Section 313 (Specific toxic chemical listings) CERCLA Hazardous Substance List (40 CFR 302.4)

**Superfund Amendments and Reauthorization Act of 1986 (SARA):  
 Section 311/312 Hazard Categories (Product)**

- Immediate Health Hazard – YES
- Delayed Health Hazard – YES
- Fire Hazard – NO
- Reactivity Hazard – NO

**15.2 US State regulations**

<b>Methylene chloride (75-09-2)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
<b>Yes</b>				
U.S. - Massachusetts - Right To Know List U.S. - Minnesota - Hazardous Substance List		U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List		
<b>Zinc (7440-66-6)</b>				
U.S. - Massachusetts - Right To Know List U.S. - Rhode Island - Right To Know List		U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List		

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**Section 16 – OTHER INFORMATION**

**SUPERSEDES LAST REVISION:** 10/28/2021 (SDS)

HMIS RATING (Hazardous Materials Information System)			
Health (blue) - 2	Flammability (red) - 2	Reactivity (yellow) - 0	Protective Equipment - X (See Sections 4, 8 & 10)

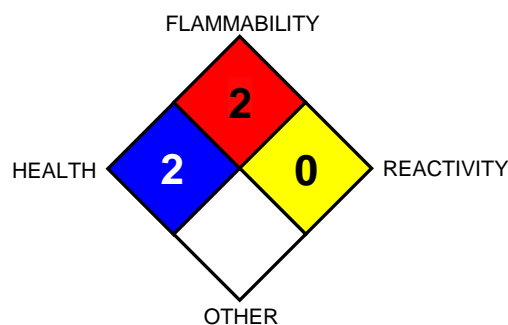
**Health Hazard:** 0 (minimal acute or chronic exposure hazard); 1 (slight acute or chronic exposure hazard); 2 (moderate acute or significant chronic exposure hazard); 3 (severe acute exposure hazard; one time overexposure can result in permanent injury and may be fatal); 4 (extreme acute exposure hazard; onetime overexposure can be fatal).

**Flammability Hazard:** 0 (minimal hazard); 1 (materials that require substantial pre-heating before burning); 2 (combustible liquid or solids; liquids with a flash point of 38-93°C [100-200°F]); 3 (Class IB and IC flammable liquids with flash points below 38°C [100°F]); 4 (Class IA flammable liquids with flash points below 23°C [73°F] and boiling points below 38°C [100°F]).

**Reactivity Hazard:** 0 (normally stable); 1 (material that can become unstable at elevated temperatures or which can react slightly with water); 2 (materials that are unstable but do not detonate or which can react violently with water); 3 (materials that can detonate when initiated or which can react explosively with water); 4 (materials that can detonate at normal temperatures or pressures).

**Caution:** HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDS's under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used only in conjunction with a fully implemented HMIS® program by workers who have received appropriate HMIS® training. HMIS® is a registered trade and service mark of the NPCA.

**NFPA RATING**



**NATIONAL FIRE PROTECTION ASSOCIATION:**

**Health Hazard:** 0 (material that on exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials);

1 (materials that on exposure under fire conditions could cause irritation or minor residual injury); 2 (materials that on intense or continued exposure under fire conditions could cause temporary incapacitation or possible residual injury); 3 (materials that can on short exposure cause serious temporary or residual injury); 4 (materials that under very short exposure causes death or major residual injury).

**Flammability Hazard:** Refer to definitions for "HMIS RATING (Hazardous Materials Information System)"

**Reactivity Hazard:** Refer to definitions for "HMIS RATING (Hazardous Materials Information System)"

**DEFINITIONS OF TERMS**

- ACGIH - American Conference of Governmental Industrial Hygienists
- CAS No. - Chemical Abstracts Service Number
- EPA - Environmental Protection Agency
- GHS - Globally Harmonized System
- IARC - International Agency for Research on Cancer
- LC50 - Lethal Concentration (50 percent kill)
- LCLO - Lowest published lethal concentration
- LD50 - Lethal dose (50 percent kill)
- LDLO - Lowest published lethal dose
- NIOSH - National Institute of Occupational Safety and Health

- NTP - National Toxicology Program
- OSHA - U.S. Occupational Safety and Health Administration
- PEL - Permissible Exposure Limit
- SARA - Superfund Amendments and Reauthorization Act
- STEL - Short Term Exposure Limit
- TCLo - the lowest concentration to cause a symptom
- TDLo - the lowest dose to cause a symptom
- TLV - Threshold Limit Value
- TSCA - Toxic Substances Control Act
- TWA - Time Weighted Average

**Full text of H-phrases (from Section 2)**

<b>Aerosol 3</b>	Pressurized container: May burst if heated
<b>Press. Gas</b>	Contains gas under pressure; may explode if heated
<b>Eye Irrit. 2A</b>	Causes serious eye irritation
<b>Carc. 2</b>	Carcinogenicity, Category 2
<b>Skin Irrit. 2</b>	Skin corrosion/irritation, Category 2
<b>STOT RE 2</b>	May cause damage to organs through prolonged or repeated exposure
<b>STOT SE 3</b>	May cause respiratory irritation
<b>STOT SE 3</b>	May cause drowsiness or dizziness

<b>H229</b>	Pressurized container: May burst if heated
<b>H280</b>	Contains gas under pressure; may explode if heated
<b>H315</b>	Causes skin irritation
<b>H319</b>	Causes serious eye irritation
<b>H335</b>	May cause respiratory irritation
<b>H336</b>	May cause drowsiness or dizziness
<b>H351</b>	Suspected of causing cancer
<b>H373</b>	May cause damage to organs through prolonged or repeated exposure

**DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES:** Crown Alloys Company urges each end user and recipient of this SDS to study it carefully. If necessary, consult an industrial hygienist or other expert to understand this information and safeguard the environment and protect workers from the potential hazards associated with the handling or use of this product. The information in this document is believed to be correct as of the date issued. However, this information is provided without any representation or warranty, expressed or implied, regarding accuracy or correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons we do not assume responsibility and expressly disclaim liability of loss, damage, or expense arising from it or any way connected with the handling, storage, use, or disposal of this product. Data may be changed from time to time. Be sure to consult the latest edition of the SDS. Compliance with all applicable Federal, State, Provincial and local laws and regulations remain the responsibility of the user.