

SAFETY DATA SHEET



CROWN ALLOYS COMPANY

Section 1 – PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Water-Based, Non-Toxic, Biodegradable Anti-Spatter and Nozzle Shield in Aerosol Containers.

PRODUCT IDENTIFICATION: CROWN 69-W (aerosol)

SPECIFICATION: N/A

RECOMMENDED USE: Non-Solvent Anti-Spatter used during various Arc Welding (AW) processes.

SUPPLIER: Crown Alloys Company
30105 Stephenson Hwy.
Madison Heights, MI. 48071

TELEPHONE NUMBER: (248) 588-3790

EMERGENCY NUMBER: (800) 255-3924 (CHEMTREC)

WEBSITE: www.crownalloys.com

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
Press. Gas H280

2.2 Label elements

GHS-US labelling

Hazard Pictograms (GHS-US):



GHS04

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

Precautionary statements (GHS-US):

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

P312 – Call a POISON CENTER or physician if you feel unwell
P314 – Get medical advice and attention if you feel unwell
P403+P233 – Store in a well-ventilated place. Keep container tightly closed
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

Other hazards which do not result in GHS classification:

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				

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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:

Contains no hazardous ingredients at or above 1.0%

Section 4 – FIRST AID MEASURES

4.1 Description of first aid measures

Ingestion:	Ingestion is unlikely. Should ingestion occur, do not induce vomiting unless directed to do so by medical personnel. Drink a glass of water or milk to dilute. Never give anything by mouth to an unconscious person. Seek medical attention immediately.
Inhalation:	No irritation with inhalation should occur. 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. Launder clothing before reuse. If irritation persists, seek medical attention.
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. 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 cause an allergic reaction in individuals who are allergic to soy

Symptoms/injuries after inhalation: Inhaling **Crown 69-W** or its fumes may irritate mucosal tissue.

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

Symptoms/injuries after eye contact: May cause temporary eye irritation and/or stinging.

Symptoms/injuries after ingestion: Not an anticipated route of exposure during normal product handling (aerosol). Ingestion may result in nausea, abdominal discomfort and/or diarrhea.

4.3 Indication of immediate medical attention and special treatment needed

No additional information available

Section 5 – FIRE-FIGHTING MEASURES

General Fire Hazards: *As shipped*, this product is nonflammable. However, 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.

5.1 Extinguishing media

Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire such as dry chemical powder, water spray, fog, CO₂ or foam.

Unsuitable extinguishing media: None known.

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.



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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. 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.

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

Contains no hazardous ingredients at or above 1.0%

8.2 Exposure controls

Appropriate Engineering Controls:

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 these products 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.

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

Respiratory Protection: Use of the Crown 69-W as per label instructions does not by itself require the use of respiratory protection, however, Crown 69-W 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

Appearance	Light amber liquid
Physical state	Liquid
Color	Light amber
Odor	None
Specific gravity (H₂O=1)	.97 mmHg
Water reactive	No
Flash point	None
Evaporation rate (H₂O=1)	1.00
Boiling point	212°F (100°C)

Flammability limit - upper (%)	Not established
Flammability limit - lower (%)	Not established
Vapor pressure (PSIG @ 70°F)	120 psig
Vapor density (Air=1)	.62
Solubility in water	Miscible
Partition coefficient (n-octanol/water)	<1.00
Auto-ignition temperature	Not established
Decomposition temperature	Not established
VOC content	0.5% (by weight)

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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 extreme heat (>120°F) and freezing (<32°F).

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

Use of the Crown 69-W as per label instructions does not by itself result in any hazardous decomposition products, however, Crown 69-W 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:** The effects of swallowing excessive amounts are not known. The ingestion of moderate amounts has caused diarrhea and vomiting.
- Inhalation:** Prolonged inhalation of mist could cause respiratory tract irritation.
- 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:** Contact by vapors and mist is moderately irritating to the eyes. Similar irritation can be experienced when hand soap or shampoos contact the eyes.

Information on toxicological effects

- Acute toxicity** (list all possible routes of exposure): Discomfort if swallowed
- Repeated dose toxicity (product):** Not classified
- 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:** No
- IARC:** No
- OSHA:** No
- ACGIH:** No

- Reproductive toxicity (product):** Not classified
- 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
- Carcinogenicity:** Not classified

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Section 12 – ECOLOGICAL INFORMATION

Eco-toxicity:	Not determined
Chronic hazards to the aquatic environment:	
Fish (product):	Not classified
Aquatic Invertebrates (product):	Not classified
Persistence and Degradability	
Biodegradation (product):	100% biodegradable / inert
Bioaccumulative Potential:	No bioaccumulation potential
Mobility in Soil:	Low volatility. Will absorb into soil.
Other Adverse Effects:	None

Section 13 – DISPOSAL CONSIDERATIONS

Product Disposal Method: This product, as manufactured in its present state, is not considered to be a hazardous waste according to 40CFR 261.4(b)(4). 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: 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

IMDG-IMO:

UN number:	1950
Class:	2
Shipping Name:	Aerosols
Subsidiary Risk:	2.2
Labeling:	Non-flammable gas
Packing Group:	N/A
EMS:	F-D, S-U
Marine Pollutant:	No

DOT HM-181 Shipping Information:

DOT Shipping Name:	Consumer commodity
Hazard Class or Division:	ORM-D (on shipping carton)
UN Number:	N/A
Packing Group:	None
Label(s) Required:	ORM-D (on shipping carton)

Section 15 – REGULATORY INFORMATION

15.1 US Federal regulations

CERCLA: None

TSCA: All components of this product are TSCA Inventory Listed and/or are exempt.

SARA TITLE III SARA Section 311 and 312 (40 CFR 370) Hazard Categories: Sudden release of pressure

15.2 US State regulations

California Proposition 65

This product does not contain chemical(s) known to the State of California to cause cancer, birth defects or reproductive harm.

California and OTC States

This product is not regulated by Consumer Regulations.

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Section 16 – OTHER INFORMATION

SUPERSEDES LAST REVISION: 01/26/2005 (MSDS)

HMIS RATING (Hazardous Materials Information System)

Health (blue) - 1	Flammability (red) - 0	Reactivity (yellow) - 0	Protective Equipment - X (See Sections 4, 8 & 10)
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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.

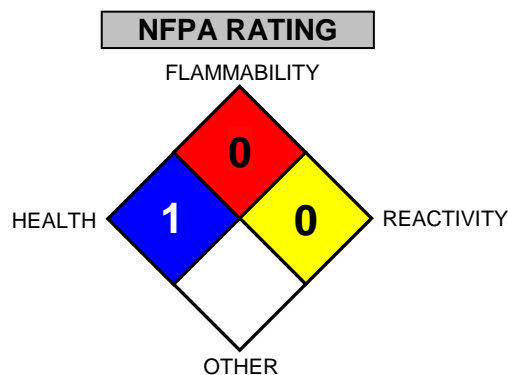
NATIONAL FIRE PROTECTION ASSOCIATION:

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

EPA - Environmental Protection Agency

GHS - Globally Harmonized System

IARC - International Agency for Research on Cancer

NIOSH - National Institute of Occupational Safety and Health

NTP - National Toxicology Program

OSHA - U.S. Occupational Safety and Health Administration

SARA - Superfund Amendments and Reauthorization Act

TSCA - Toxic Substances Control Act

TWA - Time Weighted Average

Full text of H-phrases (from Section 2)

H229	Pressurized container: May burst if heated
H280	Contains gas under pressure; may explode if heated
H302	Harmful if swallowed
H335	May cause respiratory irritation

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.