



### SIP Argon/CO2 Welding Gas #712-359

SIP Argon/CO2 Welding Gas #712-359  
Issue Date: 15-Apr-2011  
XC9317SC

**Hazard Alert Code: LOW**

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Version No:2.0  
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## Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### PRODUCT NAME

SIP Argon/CO2 Welding Gas #712-359

### SYNONYMS

"shielding gas", "argon welding gas", "welding gas", CP-0608, "RS Components"

### PROPER SHIPPING NAME

COMPRESSED GAS, N.O.S.(contains argon and carbon dioxide)

### PRODUCT USE

Welding gas.

### SUPPLIER

Company: RS Components Pty Ltd  
Address:  
25 Pavesi Street  
Smithfield  
NSW 2164  
Australia  
Telephone: 02 9681 8500  
Emergency Tel: **1800 039 008**  
Emergency Tel: **03 95733112**  
Fax: 02 9681 8600

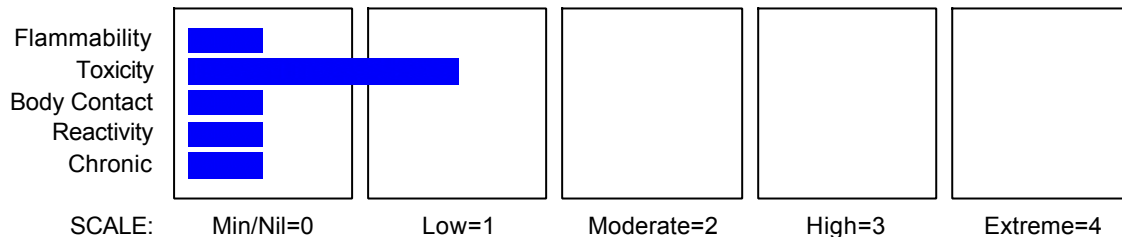
Company: RS Components Pty Ltd  
Address:  
Units 30- 31 Warehouse World  
761 Great South Road  
Penrose Auckland 1006  
New Zealand  
Telephone: 09 579 5885  
Emergency Tel: **1800 039 008**  
Emergency Tel: **03 9573 3112**  
Fax: 09 579 9585

## Section 2 - HAZARDS IDENTIFICATION

### STATEMENT OF HAZARDOUS NATURE

**DANGEROUS GOODS. NON-HAZARDOUS SUBSTANCE. According to NOHSC Criteria, and ADG Code.**

### CHEMWATCH HAZARD RATINGS



### RISK

- Risk of explosion if heated under confinement.
  - Inhalation may produce health damage\*.
  - Cumulative effects may result following exposure\*.
- \*(limited evidence).

### SAFETY

- Do not breathe gas/fumes/vapour/spray.
- Avoid contact with skin.
- Use only in well ventilated areas.
- Keep container in a well ventilated place.
- Keep container tightly closed.
- This material and its container must be disposed of as hazardous waste.

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Section 2 - HAZARDS IDENTIFICATION

### Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
argon	7440-37-1	80
carbon dioxide	124-38-9	20

### Section 4 - FIRST AID MEASURES

#### SWALLOWED

- Generally not applicable.

#### EYE

- If this product comes in contact with the eyes:
  - Wash out immediately with fresh running water.
  - Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
  - Seek medical attention without delay; if pain persists or recurs seek medical attention.
  - Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

#### SKIN

- In case of burns:
  - Quickly immerse affected area in cold running water for 10 to 15 minutes.
  - Bandage lightly with a sterile dressing. Treat for shock if required.
  - Lay patient down. Keep warm and rested.
  - Transport to hospital, or doctor.
- In case of cold burns (frost-bite):
  - Move casualty into warmth before thawing the affected part; if feet are affected carry if possible
  - Bathe the affected area immediately in luke-warm water (not more than 35 deg C) for 10 to 15 minutes, immersing if possible and without rubbing
  - DO NOT apply hot water or radiant heat.
  - Apply a clean, dry, light dressing of "fluffed-up" dry gauze bandage.

#### INHALED

- If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.
- Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.

#### NOTES TO PHYSICIAN

- Treat symptomatically.

### Section 5 - FIRE FIGHTING MEASURES

#### EXTINGUISHING MEDIA

- Water spray or fog.
- There is no restriction on the type of extinguisher which may be used.

#### FIRE FIGHTING

- Product is not combustible. No special firefighting procedures required.
- Use water delivered as a fine spray to control fire and cool adjacent area.
- Do not approach containers suspected to be hot.
- Cool fire exposed containers with water spray from a protected location.
- If safe to do so, remove containers from path of fire.

Use fire fighting procedures suitable for surrounding area.

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Section 5 - FIRE FIGHTING MEASURES

#### FIRE/EXPLOSION HAZARD

- Non combustible.

Heating may cause expansion or decomposition leading to violent rupture of containers.

#### FIRE INCOMPATIBILITY

- Very inert, chemically.

#### HAZCHEM

2TE

#### Personal Protective Equipment

Breathing apparatus.

Gas tight chemical resistant suit.

Limit exposure duration to 1 BA set 30 mins.

### Section 6 - ACCIDENTAL RELEASE MEASURES

#### MINOR SPILLS

- Stop leak if safe to do so.
- Remove leaking cylinders to a safe place if possible.
- Release pressure under safe, controlled conditions by opening the valve.

#### MAJOR SPILLS

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- Increase ventilation.
- Wear breathing apparatus plus protective gloves.
- Stop leak if safe to do so.
- Increase ventilation.
- DO NOT exert excessive pressure on valve; DO NOT attempt to operate damaged valve.
  - Remove leaking cylinders to a safe place if possible.
  - Release pressure under safe, controlled conditions by opening the valve.

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

### Section 7 - HANDLING AND STORAGE

#### PROCEDURE FOR HANDLING

- Use good occupational work practice.

Avoid inhalation.

Local exhaust ventilation may be required for safe working, i.e. to keep exposures below required standards, otherwise PPE is required.

until atmosphere has been checked.

Avoid physical damage to containers.

- Most acrylic monomers have low viscosity therefore pouring, material transfer and processing of these materials do not necessitate heating.
- Viscous monomers may require heating to facilitate handling. To facilitate product transfer from original containers, product must be heated to no more than 60 deg. C. (140 F.), for not more than 24 hours.
- Do NOT use localised heat sources such as band heaters to heat/ melt product.
- Do NOT use steam .

When handling, DO NOT eat, drink or smoke.

Keep containers securely sealed when not in use.

Transport containers on a trolley.

- DO NOT transfer gas from one cylinder to another.

#### SUITABLE CONTAINER

- Check that containers are clearly labelled.
- Cylinder fitted with valve protector cap. Ensure the use of equipment rated for cylinder pressure.

#### STORAGE INCOMPATIBILITY

Carbon dioxide is capable of reaction with alkali metals and their hydrides,

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 Section 7 - HANDLING AND STORAGE

alkaline earth metals, metal acetylides, chromium, titanium above 550 C and uranium above 750 C.

**STORAGE REQUIREMENTS**

- Store in original containers.
- Keep containers securely sealed.
- Store in a cool, dry area protected from environmental extremes.
- Store away from incompatible materials and foodstuff containers.
- Store in an upright position.

Store in a cool, dry and well-ventilated area.

Store under cover.

- Outside or detached storage is preferred.
- Protect containers against physical damage.
- Keep containers securely sealed.
- Check regularly for gas leaks.  
 Contents under pressure.

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

**EXPOSURE CONTROLS**

Source	Material	TWA ppm	TWA mg/m <sup>3</sup>	STEL ppm	STEL mg/m <sup>3</sup>	Peak ppm	Peak mg/m <sup>3</sup>	TWA F/CC	Notes
Australia Exposure Standards	carbon dioxide (Carbon dioxide in coal mines)	12500	22500	30000	54000				
Australia Exposure Standards	carbon dioxide (Carbon dioxide)	5000	9000	30000	54000				

**PERSONAL PROTECTION**



**EYE**

- Safety glasses with side shields.
- Full face shield.
- Welding mask, goggles, hand shield.

**HANDS/FEET**

- Welding gloves.
- Protective footwear.

**ENGINEERING CONTROLS**

■ Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

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## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

### APPEARANCE

Colorless compressed gas mixture.

### PHYSICAL PROPERTIES

Gas.

State	Compressed gas	Molecular Weight	Not applicable
Melting Range (°C)	Not available	Boiling Range (°C)	Not available
Solubility in water (g/L)	Not available	Flash Point (°C)	Not applicable
pH (1% solution)	Not applicable	Decomposition Temp (°C)	Not available
pH (as supplied)	Not applicable	Autoignition Temp (°C)	Not applicable
Vapour Pressure (kPa)	Not available	Upper Explosive Limit (%)	Not applicable
Specific Gravity (water=1)	Not available	Lower Explosive Limit (%)	Not applicable
Relative Vapour Density (air=1)	>1	Volatile Component (%vol)	Not available
Evaporation Rate	Not available		

carbon dioxide

log Kow (Sangster 1997):

0.83

## Section 10 - STABILITY AND REACTIVITY

### CONDITIONS CONTRIBUTING TO INSTABILITY

■ Product is considered stable under normal handling conditions.

Stable under normal storage conditions.

Hazardous polymerisation will not occur.

*For incompatible materials - refer to Section 7 - Handling and Storage.*

## Section 11 - TOXICOLOGICAL INFORMATION

### POTENTIAL HEALTH EFFECTS

#### ACUTE HEALTH EFFECTS

■ Inhalation may produce health damage\*.

■ \* (limited evidence).

#### CHRONIC HEALTH EFFECTS

■ Cumulative effects may result following exposure\*.

■ \* (limited evidence).

### TOXICITY AND IRRITATION

■ Not available. Refer to individual constituents.

### REPROTOXIN

carbon dioxide

ILO Chemicals in the electronics industry  
that have toxic effects on reproduction

Reduced fertility or  
sterility

## Section 12 - ECOLOGICAL INFORMATION

This material and its container must be disposed of as hazardous waste.

### Ecotoxicity

Ingredient

Persistence:

Persistence: Air

Bioaccumulation

Mobility

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argon

Water/Soil  
No Data  
Available  
No Data  
Available

No Data  
Available  
No Data  
Available

continued...

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 Section 12 - ECOLOGICAL INFORMATION

carbon dioxide	LOW	No Data Available	LOW	HIGH
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## Section 13 - DISPOSAL CONSIDERATIONS

- Return empty containers to supplier.

## Section 14 - TRANSPORTATION INFORMATION



Labels Required: NON-FLAMMABLE COMPRESSED GAS

**HAZCHEM:**  
 2TE (ADG7)

**Land Transport UNDG:**

Class or division:	2.2	Subsidiary risk:	None
UN No.:	1956	UN packing group:	None
Shipping Name: COMPRESSED GAS, N.O.S. (contains argon and carbon dioxide)			

**Air Transport IATA:**

UN/ID Number:	1956	Packing Group:	-
Special provisions:	None		
Cargo Only			
Packing Instructions:	200	Maximum Qty/Pack:	150 kg
Passenger and Cargo			
Packing Instructions:	Forbidden	Maximum Qty/Pack:	75 kg
Passenger and Cargo Limited Quantity			
Packing Instructions:	200	Maximum Qty/Pack:	Forbidden

Shipping Name: COMPRESSED GAS, N.O.S. \*(CONTAINS ARGON AND CARBON DIOXIDE)

**Maritime Transport IMDG:**

IMDG Class:	2.2	IMDG Subrisk:	None
UN Number:	1956	Packing Group:	None
EMS Number:	F-C,S-V	Special provisions:	274
Limited Quantities:	120 ml		
Shipping Name: COMPRESSED GAS, N.O.S.(contains argon and carbon dioxide)			

## Section 15 - REGULATORY INFORMATION

POISONS SCHEDULE None

**REGULATIONS**

**Regulations for ingredients**

**argon (CAS: 7440-37-1) is found on the following regulatory lists;**  
 "Australia Exposure Standards", "Australia High Volume Industrial Chemical List (HVICL)", "Australia Inventory of Chemical Substances (AICS)"

**carbon dioxide (CAS: 124-38-9) is found on the following regulatory lists;**  
 "Australia Exposure Standards", "Australia Hazardous Substances", "Australia High Volume Industrial Chemical List (HVICL)",

continued...

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Section 15 - REGULATORY INFORMATION

"Australia Inventory of Chemical Substances (AICS)", "CODEX General Standard for Food Additives (GSFA) - Additives Permitted for Use in Food in General, Unless Otherwise Specified, in Accordance with GMP"

No data for SIP Argon/CO2 Welding Gas #712-359 (CW: 4806-18)

### Section 16 - OTHER INFORMATION

■ Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:

[www.chemwatch.net/references](http://www.chemwatch.net/references).

■ The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings.

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*This is the end of the MSDS.*