



## SAFETY DATA SHEET

### Carbon Monoxide Aerosol

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

##### 1.1. Product identifier

**Product name** Carbon Monoxide Aerosol

##### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** Propellant Source

##### 1.3. Details of the supplier of the safety data sheet

**Supplier** Arctic Hayes Ltd  
Glover Way  
Leeds  
West Yorkshire  
LS11 5JP  
T+44 (0) 113 271 5245  
F+44 (0) 113 271 5779  
sales@arctic-hayes.com

##### 1.4. Emergency telephone number

**Emergency telephone** +44 (0)113 271 5245

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### Classification

**Physical hazards** Aerosol 3 - H229

**Health hazards** Not Classified

**Environmental hazards** Not Classified

**Human health** Gas or vapour is harmful on prolonged exposure or in high concentrations. In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Deliberately concentrating and inhaling the contents of this container is dangerous and can be fatal. May cause suffocation.

**Environmental** The product is not expected to be hazardous to the environment.

**Physicochemical** Aerosol containers can explode when heated, due to excessive pressure build-up.

##### 2.2. Label elements

**Signal word** Warning

**Hazard statements** H229 Pressurised container: may burst if heated

**Precautionary statements** P251 Do not pierce or burn, even after use.  
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.  
P102 Keep out of reach of children.  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P260 Do not breathe vapour/spray.  
P271 Use only outdoors or in a well-ventilated area.  
P501 Dispose of contents/container in accordance with local regulations.

##### 2.3. Other hazards

## Carbon Monoxide Aerosol

This product does not contain any substances classified as PBT or vPvB.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

<b>Nitrogen</b>	<b>60-100%</b>
CAS number: 7727-37-9	EC number: 231-783-9

#### Classification

Press. Gas, Compressed - H280

#### CARBON MONOXIDE

**<1%**

CAS number: 630-08-0

EC number: 211-128-3

REACH registration number: 01-2119480165-39-XXXX

#### Classification

Flam. Gas 1 - H220

Press. Gas, Compressed - H280

Acute Tox. 3 - H331

Repr. 1A - H360D

STOT RE 1 - H372

#### Classification (67/548/EEC or 1999/45/EC)

F+;R12 Repr. Cat. 1;R61 T;R23,R48/23

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

<b>General information</b>	Move affected person to fresh air at once.
<b>Inhalation</b>	If spray/mist has been inhaled, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
<b>Ingestion</b>	Rinse mouth thoroughly with water. Do not induce vomiting.
<b>Skin contact</b>	Use suitable lotion to moisturise skin.
<b>Eye contact</b>	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.

#### 4.2. Most important symptoms and effects, both acute and delayed

<b>General information</b>	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
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#### 4.3. Indication of any immediate medical attention and special treatment needed

<b>Notes for the doctor</b>	Treat symptomatically.
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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	Use fire-extinguishing media suitable for the surrounding fire.
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#### 5.2. Special hazards arising from the substance or mixture

<b>Specific hazards</b>	Containers can burst violently or explode when heated, due to excessive pressure build-up. The product is not flammable.
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## Carbon Monoxide Aerosol

### 5.3. Advice for firefighters

<b>Protective actions during firefighting</b>	Warn firefighters that aerosols are involved. Containers close to fire should be removed or cooled with water.
<b>Special protective equipment for firefighters</b>	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

<b>Personal precautions</b>	Wear protective clothing as described in Section 8 of this safety data sheet. Evacuate area. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Monitor oxygen level. Ventilate the area.
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### 6.2. Environmental precautions

<b>Environmental precautions</b>	Do not discharge into any place where its accumulation could be dangerous. Prevent further leakage or spillage if safe to do so.
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### 6.3. Methods and material for containment and cleaning up

<b>Methods for cleaning up</b>	VENTILATE/EVAPORATE.
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### 6.4. Reference to other sections

<b>Reference to other sections</b>	For personal protection, see Section 8. For waste disposal, see Section 13.
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## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

<b>Usage precautions</b>	Read and follow manufacturer's recommendations. Do not spray on a naked flame or any incandescent material. Do not expose to temperatures exceeding 50°C/122°F.
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### 7.2. Conditions for safe storage, including any incompatibilities

<b>Storage precautions</b>	Keep away from heat, sparks and open flame. Store at moderate temperatures in dry, well ventilated area. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.
<b>Storage class</b>	Compressed gas storage.

### 7.3. Specific end use(s)

<b>Specific end use(s)</b>	The identified uses for this product are detailed in Section 1.2.
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## SECTION 8: Exposure Controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

#### CARBON MONOXIDE

Long-term exposure limit (8-hour TWA): WEL 30 ppm 35 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 200 ppm 232 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit

### 8.2. Exposure controls

<b>Appropriate engineering controls</b>	Provide adequate ventilation. Avoid inhalation of vapours and spray/mists. Observe any occupational exposure limits for the product or ingredients.
<b>Personal protection</b>	When using do not eat, drink or smoke.
<b>Eye/face protection</b>	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles.

## Carbon Monoxide Aerosol

<b>Hand protection</b>	Due to the packaging form, aerosol, risk of skin contact is small. Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.
<b>Other skin and body protection</b>	Not relevant.
<b>Hygiene measures</b>	Wash hands after handling. Wash promptly if skin becomes contaminated. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Use appropriate skin cream to prevent drying of skin.
<b>Respiratory protection</b>	If ventilation is inadequate, suitable respiratory protection must be worn. Self-containing breathing apparatus (SCBA) or positive pressure airline with mask are to be used in oxygen-deficient atmosphere. Air purifiers respirators will not provide protection. Users of breathing apparatus must be trained.

### SECTION 9: Physical and Chemical Properties

#### 9.1. Information on basic physical and chemical properties

<b>Appearance</b>	Aerosol.
<b>Colour</b>	Colourless.
<b>Odour</b>	No characteristic odour.
<b>Flash point</b>	>100°C
<b>Relative density</b>	0.9669 (air = 1) Lighter or similar to air.
<b>Comments</b>	Information given is applicable to the major ingredient.

#### 9.2. Other information

<b>Other information</b>	Not available.
<b>Molecular weight</b>	28 g/mol
<b>Volatile organic compound</b>	This product contains a maximum VOC content of 0 g/l.

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

<b>Reactivity</b>	Stable at normal ambient temperatures and when used as recommended.
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#### 10.2. Chemical stability

<b>Stability</b>	Stable at normal ambient temperatures and when used as recommended.
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#### 10.3. Possibility of hazardous reactions

<b>Possibility of hazardous reactions</b>	Does not decompose when used and stored as recommended.
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#### 10.4. Conditions to avoid

<b>Conditions to avoid</b>	Avoid heat, flames and other sources of ignition.
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#### 10.5. Incompatible materials

<b>Materials to avoid</b>	Keep away from oxidising materials, heat and flames.
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#### 10.6. Hazardous decomposition products

## Carbon Monoxide Aerosol

<b>Hazardous decomposition products</b>	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapours.
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### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

**Toxicological effects** Carbon monoxide : LC50 (1h) : 3760ppm - Species :Rat

##### Acute toxicity - oral

**ATE oral (mg/kg)** 100,000.0

##### Acute toxicity - inhalation

**ATE inhalation (gases ppm)** 350,000.0

**ATE inhalation (vapours mg/l)** 1,500.0

**ATE inhalation (dusts/mists mg/l)** 250.0

**Inhalation** Gas or vapour displaces oxygen available for breathing (asphyxiant). Unconsciousness, possibly death.

**Ingestion** No specific health hazards known.

**Skin contact** Skin irritation should not occur when used as recommended. Repeated exposure may cause skin dryness or cracking.

**Eye contact** Vapour or spray in the eyes may cause irritation and smarting.

**Acute and chronic health hazards** Because of the product's quantity and composition, the health hazard is regarded as low. In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

**Route of entry** Inhalation

**Target organs** No specific target organs known.

**Medical symptoms** Exposure to oxygen deficient atmosphere may cause the following symptoms: Dizziness. Nausea, vomiting.

### SECTION 12: Ecological Information

**Ecotoxicity** Not regarded as dangerous for the environment. The product is not expected to be hazardous to the environment.

#### 12.1. Toxicity

**Toxicity** Not available.

#### 12.2. Persistence and degradability

**Persistence and degradability** Not available.

#### 12.3. Bioaccumulative potential

**Bioaccumulative potential** Not available.

#### 12.4. Mobility in soil

**Mobility** Not known.

#### 12.5. Results of PBT and vPvB assessment

## Carbon Monoxide Aerosol

**Results of PBT and vPvB assessment** Not available.

### 12.6. Other adverse effects

**Other adverse effects** Not available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**General information** Do not puncture or incinerate, even when empty.

**Disposal methods** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

## SECTION 14: Transport information

**General** This product is packed in accordance with the Limited Quantity Provisions of CDGCPL2, ADR and IMDG. These provisions allow transport of aerosols of less than 1 litre packed in cartons of less than 30kg gross weight to be exempt from control providing that they are labelled in accordance with the requirements of these regulations to show that they are being transported as Limited Quantities. Aerosols not so packed and labelled must show the following.

### 14.1. UN number

**UN No. (ADR/RID)** 1950

**UN No. (IMDG)** 1950

**UN No. (ICAO)** 1950

### 14.2. UN proper shipping name

**Proper shipping name (ADR/RID)** AEROSOLS

**Proper shipping name (IMDG)** AEROSOLS

**Proper shipping name (ICAO)** AEROSOLS

**Proper shipping name (ADN)** AEROSOLS

### 14.3. Transport hazard class(es)

**ADR/RID class** 2.2

**ADR/RID label** 2.2

**IMDG class** 2.2

**ICAO class/division** 2.2

### Transport labels



### 14.4. Packing group

Not applicable.

### 14.5. Environmental hazards

## Carbon Monoxide Aerosol

Environmentally hazardous substance/marine pollutant

No.

### 14.6. Special precautions for user

EmS F-D, S-U

Tunnel restriction code (E)

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78  
and the IBC Code

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

**National regulations** The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

**EU legislation** Commission Regulation (EU) No 453/2010 of 20 May 2010.

**Guidance** Workplace Exposure Limits EH40.  
CHIP for everyone HSG228.  
Safety Data Sheets for Substances and Preparations.  
Approved Classification and Labelling Guide (Sixth edition) L131.  
British Aerosol Manufacturers Code of Practice 7th. Edition 1999

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

## SECTION 16: Other information

**Revision comments** Supplemental information added.

**Revision date** 05/06/2015

**Revision** 1

**SDS number** 20836

**SDS status** Approved.

**Risk phrases in full** Not classified.  
R23 Toxic by inhalation.  
R25 Toxic if swallowed.  
R38 Irritating to skin.  
R41 Risk of serious damage to eyes.  
R50 Very toxic to aquatic organisms.  
R8 Contact with combustible material may cause fire.

**Hazard statements in full** H220 Extremely flammable gas.  
H229 Pressurised container: may burst if heated  
H280 Contains gas under pressure; may explode if heated.  
H331 Toxic if inhaled.  
H360D May damage the unborn child.  
H372 Causes damage to organs through prolonged or repeated exposure.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.