

SAFETY DATA SHEET

Carbon Monoxide Aerosol



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

1.1. Product identifier

Product name PHCO520 - SLEEPSAFE CARBON MONOXIDE TEST SPRAY.

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 (EC 1272/2008)

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

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

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SECTION 3: Composition/information on ingredients

3.2. Mixtures

Helium		60-100%
CAS number: 7440-59-7	EC number: 231-168-5	
Classification Press. Gas (Comp.) - 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 (Comp.) - H280 Acute Tox. 3 - H331 Repr. 1A - H360D STOT RE 1 - H372		

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Move affected person to fresh air at once.
Inhalation	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. Remove to fresh air. If breathing has stopped or is laboured, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately. In case of shortness of breath, give oxygen.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting.
Skin contact	Use suitable lotion to moisturise skin.
Eye contact	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

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure. Exposure to oxygen deficient atmosphere may cause the following symptoms: Dizziness. Salivation. Nausea. Vomiting. Loss of mobility/consciousness.
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4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.
Specific treatments	Hyperbaric oxygen is the most efficient treatment of carbon monoxide and dramatically reduces the biological half-life of carboxyhemoglobin. Although less effective, 100% oxygen by mask is useful if hyperbaric facilities are not available. Stimulant drugs are not indicated. If exposed or concerned: Get medical attention/advice.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Containers can burst violently or explode when heated, due to excessive pressure build-up. Upon exposure to intense heat or flame, cylinder will vent rapidly and or rupture violently. Product is non-flammable and does not support combustion. Move away from container and cool with water from a protected position. Keep containers and surroundings cool with water spray.

5.3. Advice for firefighters

Protective actions during firefighting Warn firefighters that aerosols are involved. Containers close to fire should be removed or cooled with water.

Special protective equipment for firefighters 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

Personal precautions 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.

For non-emergency personnel Evacuate personnel to safe areas. Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe. Monitor oxygen level. Ventilate the area.

6.2. Environmental precautions

Environmental precautions Do not discharge into any place where its accumulation could be dangerous. Prevent further leakage or spillage if safe to do so.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up VENTILATE/EVAPORATE. If possible, stop flow of product. Increase ventilation to the release area and monitor oxygen level.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions 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.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions 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.

Storage class Compressed gas storage.

7.3. Specific end use(s)

Specific end use(s) 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/m³

Short-term exposure limit (15-minute): WEL 200 ppm 232 mg/m³

WEL = Workplace Exposure Limit

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation. Avoid inhalation of vapours and spray/mists. Observe any occupational exposure limits for the product or ingredients.

Personal protection

When using do not eat, drink or smoke.

Eye/face protection

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.

Hand protection

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.

Other skin and body protection

Not relevant.

Hygiene measures

Wash hands after handling. Wash promptly if skin becomes contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet. Use appropriate skin cream to prevent drying of skin.

Respiratory protection

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

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

9.2. Other information

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

SECTION 10: Stability and reactivity

10.1. Reactivity

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Reactivity Stable at normal ambient temperatures and when used as recommended.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Does not decompose when used and stored as recommended.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials to avoid Keep away from oxidising materials, heat and flames.

10.6. Hazardous decomposition products

Hazardous decomposition products 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.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

Acute toxicity - inhalation

ATE inhalation (gases ppm) 318,181.82

ATE inhalation (vapours mg/l) 1,363.64

ATE inhalation (dusts/mists mg/l) 227.27

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 exposure 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.

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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

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

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ICAO class/division 2.2

Transport labels



14.4. Packing group

Not applicable.

14.5. Environmental hazards

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 MARPOL 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 Revised formulation.

Revision date 01/09/2017

Revision 2

SDS number 20836

SDS status Approved.

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.

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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.