

Material Safety Data Sheet - Helium

1. IDENTIFICATION OF THE SUBSTANCE/ PREPARATION AND OF THE COMPANY

MSDS NR : 061 A
 PRODUCT NAME : Helium
 CHEMICAL FORMULA : He
 COMPANY IDENTIFICATION : See heading and/or footer
 EMERGENCY PHONE NUMBER : 603-207 89 200

2. COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE / PREPARATION : Substance
 COMPONENTS / IMPURITIES : Contains on other components or impurities which will influence the classification of the product
 CAS NR : 07440-59-7
 EEC NR. (FROM EINECS) : 2311685

3. PHYSICAL AND CHEMICAL PROPERTIES

MOLECULAR WEIGHT : 4
 MELTING POINT : Not applicable
 BOILING POINT : -269 °C
 CRITICAL TEMPERATURE : -268 °C
 RELATIVE DENSITY, GAS : 0.14 (air = 1)
 RELATIVE DENSITY, LIQUID : Not applicable
 VAPOUR PRESSURE 20 °C : Not applicable
 SOLUBILITY MG/L WATER : 1.5 mg/l
 APPEARANCE / COLOR : Colorless gas
 ODOUR : No odour warning properties

4. FIRST AID MEASURES

INHALATION

In high concentrations may cause asphyxiation. Symptoms may included loss of mobility / consciousness. Victim may not be aware of asphyxiation.
 Remove victim to uncontaminated area wearing self-contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.

5. FIRE FIGHTING MEASURE

SPECIFIC HAZARDS : Exposure to fire may cause containers to reapture / explode.
 Non flammable.
 HAZARDOUS COMBUSTION PRODUCTS : None
 SUITABLE EXTINGUISHING MEDIA : All know extinguishants can be used
 SPECIFIC METHODS : If possible, stop flow of product. Move container away or cool with water from a protected position.
 SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS : In confined space use self-contained breathing apparatus

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Evacuate area. Ware self-contained breathing apparatus when entering area unless atmosphere is proved to be safe. Ensure adequate air ventilation.

ENVIRONMENTAL PRECAUTIONS

Try to stop release.

CLEAN UP METHODS

Ventilate area.

Material Safety Data Sheet - Helium

7. HANDLING AND STORAGE

Suck back of water into the container must be prevented. Do not allow backfeed into the container. Use only properly specified equipment, which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt. Segregate from oxidant gases and other oxidants in store. Keep container below 50 °C in a well-ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

PERSONAL PROTECTION : Ensure adequate ventilation.

9. HAZARDS IDENTIFICATION

Liquefied gas.
In high concentration may cause asphyxiation

10. STABILITY AND REACTIVITY

STABILITY AND REACTIVITY : Stable under normal conditions.

11. TOXICOLOGICAL INFORMATION

GENERAL : No know toxicological effects from this product

12. ECOLOGICAL INFORMATION

GENERAL : No know ecological damages caused by this product

13. DISPOSAL CONSIDERATIONS

GENERAL : Do not discharge into any place where accumulation could be dangerous. To atmosphere in a well ventilated place. Contact supplier if guidance is required.

14. TRANSPORT INFORMATION

UN NR. : 1046
CLASS / DIV. : 2.2
ADR / RID ITEM NR. : 2, 1a
ADR / RID HAZARD NR. : 20
TREM CARD NR. : 828
GROUP CARD NR. : 20g 01
LABELING ADR : Label 2: non-flammable non-toxic gas.

OTHER TRANSPORT INFORMATION :

Avoid transport on vehicles where load space is not separated from the driver's compartment ensures vehicles driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency. Before transporting product containers ensure that they are firmly secured and:

- cylinder valve is closed and not leaking
- valve outlet cap nut or plug (where provided) is correctly fitted
- valve protection device (where provided) is correctly fitted
- adequate ventilation
- compliance with applicable regulations

15. REGULATORY INFORMATION

NUMBER IN ANNEX 1 OF DIR 67 / 548 : Not included in Annex 1
EC CLASSIFICATION : Proposed by the industry. Not classified as a dangerous substance

LABELING OF CYLINDERS : SYMBOLS
Road transport symbols are used and selected according to the most stringent product classification -EC or ADR.
Label 2 : Non flammable non toxic gas.

RISK PHRASES : RAs Asphyxiate in high concentrations
SAFETY PHRASES : S9 Keep container in well ventilated place.
S23 Do not breathe the gas.

Material Safety Data Sheet - Helium

16. OTHER INFORMATION

Ensure all national / local regulations are observed. Ensure operators understand the flammability hazard. The hazard of asphyxiation is often overlooked and must be stressed during operator training. Before using this product in any new process or experiment, a thorough material compatibility and safety study should be carried out. Details given in this document are believed to be correct at the time of going to press. Whilst proper care has been taken in the preparation of this document, no liability for injury or damage resulting from its use can be accepted.