1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY

Product name: Stainshield Light/Universal/Heavy.
Company identification: See end of page 2.
Emergency phone Nos: See end of page 2.

2 COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Preparation: Components/Impurities
Contains the following components:
- Stainshield Light: 85% He, 1.5% CO₂, balance Ar.
- Stainshield Universal: 55% He, 2% CO₂, balance Ar.
- Stainshield Heavy: 38% He, 2% CO₂, balance Ar.

EEC Nr (from EINECS): Not applicable for preparation.

3 HAZARDS IDENTIFICATION

Hazards identification: In high concentrations may cause asphyxiation. Compressed gas.

4 FIRST AID MEASURES

Inhalation: In high concentrations may cause asphyxiation and death. Symptoms may include loss of mobility/consciousness. Victim may not be aware of asphyxiation. Low concentrations of CO₂ cause increased respiration and headache. Remove victim to uncontaminated area wearing self-contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.

Ingestion: Ingestion is not considered a potential route of exposure.

5 FIRE FIGHTING MEASURES

Specific hazards: Exposure to fire may cause containers to rupture/explode. Inform Fire Brigade. Non flammable.

Hazardous combustion products: None.
Suitable extinguishing media: All known extinguishants can be used.
Specific methods: If possible, stop flow of product. Move away from container and 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. Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe. Ensure adequate air ventilation. Post warning notices.

Environmental precautions: Try to stop release.

Clean up methods: Ventilate area.

7 HANDLING AND STORAGE

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 BOC if in doubt. Refer to BOC container handling instructions. Keep container below 50°C in a well ventilated place.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION


Personal protection: Ensure adequate ventilation.

9 PHYSICAL AND CHEMICAL PROPERTIES

Relative density, gas: Lighter or similar to air.
Solubility mg/l water: Not known.
Appearance/Colour: Colourless gas.
Odour: None.

10 STABILITY AND REACTIVITY

Stability and reactivity: Stable under normal conditions.

11 TOXICOLOGICAL INFORMATION

General: Carbon dioxide – In high concentrations cause rapid circulatory insufficiency. Symptoms are headache, nausea and vomiting, which may lead to unconsciousness.

12 ECOLOGICAL INFORMATION

General: Carbon dioxide – When discharged in large quantities may contribute to the greenhouse effect.
13 DISPOSAL CONSIDERATIONS

General
Do not discharge into any place where its accumulation could be dangerous. Contact BOC if guidance is required.

14 TRANSPORT INFORMATION

Proper Shipping Name
Compressed gas, N.O.S.
(Helium, Argon)

UN Nr
1956.

Class/Div
2.2.

ADR/RID Classification Code
1A.

ADR/RID Hazard Nr
20.

Labelling ADR
Label 2.2: non flammable non toxic gas.

Other transport information
Avoid transport on vehicles where the load space is not separated from the driver’s compartment. Ensure vehicle 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 I of Dir 67/548
Not applicable for preparations.

EC Classification
Not classified as dangerous substance.

Labelling of cylinders
- Symbols
Label 2.2: non flammable non toxic gas.

16 OTHER INFORMATION

Ensure all national/local regulations are observed.

Asphyxiant in high concentrations.

Keep container in well ventilated place.

Do not breathe the gas.

The hazard of asphyxiation is often overlooked and must be stressed during operator training.

Users of breathing apparatus must be trained.

This Safety Data Sheet has been established in accordance with the applicable European Directives and applies to all countries that have translated the Directives in their national laws.

Before using this product in any new process or experiment, a thorough material compatibility and safety study should be carried out. Although this shielding gas alone does not exhibit toxic/harmful effects, the fumes generated from a welding process can be hazardous to health.

Always leak check cylinders when first collected, delivered or used, using an approved leak detection fluid.

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.

For further safety information please refer to “Safe Under Pressure” and “Guidance for the carriage of gas cylinders on vehicles”, both of which are available from your local BOC outlet.

---

<table>
<thead>
<tr>
<th>Cylinder Size</th>
<th>Max Fill Pressure at 15°C Bar</th>
<th>Approx. dimensions incl. valve &amp; guard where supplied (mm)</th>
<th>Approx. Gross cylinder weight (kg)</th>
<th>Manifolded cylinder pallets (MCP)</th>
<th>Max Fill Pressure at 15°C Bar</th>
<th>Approx. dimensions incl. valve and guard where supplied (mm)</th>
<th>Approx Gross Cylinder Weight (Kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>230</td>
<td>140 X 940</td>
<td>19</td>
<td>WN (15 X N)</td>
<td>200</td>
<td>1290 X 1810 X 840</td>
<td>1500</td>
</tr>
<tr>
<td>L</td>
<td>230</td>
<td>230 X 1640</td>
<td>87</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

For product and safety enquiries please phone

In the United Kingdom: 0800 111 333

In the Republic of Ireland: Dublin 1850 333 435

BOC Ireland
P.O. Box 201
Bluebell, Dublin 12
Fax: (01) 409 1801

BOC Customer Service Centre
Priestley Road, Worsley
Manchester M28 2UT
Fax: 0800 111 555
www.bocindustrial.co.uk

Please photocopy if further copies required