

# Specshield H<sub>2</sub>/N<sub>2</sub>

(mixtures containing less than 5.7% hydrogen)

PRODUCT: HYDROGEN/NITROGEN MSDS NR: 300-10-0005 BOC VERSION: 1.06 DATE: 17/08/06 PAGE: 1/1

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

<b>Product name</b>	Hydrogen/nitrogen
<b>Company identification</b>	see footer
<b>Emergency phone Nos</b>	see footer

## 2 COMPOSITION/INFORMATION ON INGREDIENTS

<b>Substance/Preparation</b>	Preparation
<b>Components/Impurities</b>	Contains between 0% and 5.7% of Hydrogen (F+;R12) (EINECS No. 215-605-7). Contains Nitrogen (EINECS No. 231-783-9).
<b>EEC Nr (from EINECS)</b>	Not applicable for preparations.

## 3 HAZARDS IDENTIFICATION

In high concentrations may cause asphyxiation.  
Compressed gas.  
Not classified as dangerous preparation.

## 4 FIRST AID MEASURES

<b>Inhalation</b>	In high concentrations may cause asphyxiation and death. Symptoms may include 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.
<b>Ingestion</b>	Ingestion is not considered a potential route of exposure.

## 5 FIRE FIGHTING MEASURES

<b>Specific hazards</b>	Exposure to fire may cause containers to rupture/explode. Inform Fire Brigade Non flammable
<b>Hazardous combustion products</b>	None
<b>Suitable extinguishing media</b>	All known extinguishants can be used.
<b>Specific methods</b>	If possible, stop flow of product. Move away from container and cool with water from a protected position.
<b>Special protective equipment for fire fighters</b>	In confined space use self-contained breathing apparatus.

## 6 ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Evacuate area. Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe. Ensure adequate air ventilation. Post warning notices.
<b>Environmental precautions</b>	Try to stop release.
<b>Clean up methods</b>	Ventilate area.

## 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 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

<b>Personal protection</b>	Ensure adequate ventilation.
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## 9 PHYSICAL AND CHEMICAL PROPERTIES

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

## 10 STABILITY AND REACTIVITY

<b>Stability and reactivity</b>	Stable under normal conditions.
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## 11 TOXICOLOGICAL INFORMATION

<b>General</b>	No known toxicological effects from this product.
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## 12 ECOLOGICAL INFORMATION

<b>General</b>	No ecological damage caused by this product.
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## 13 DISPOSAL CONSIDERATIONS

<b>General</b>	Do not discharge into any place where its accumulation could be dangerous. Contact BOC if guidance is required.
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# SAFETY DATA SHEET

## 14 TRANSPORT INFORMATION

<b>Proper Shipping Name</b>	Compressed gas, N.O.S. (Nitrogen)
<b>UN Nr</b>	1956
<b>Class</b>	2.2
<b>ADR/RID Classification Code</b>	1A
<b>ADR/RID Hazard Nr</b>	20
<b>Labelling ADR</b>	Label 2.2: non flammable non toxic gas
<b>Other transport information</b>	<p>Avoid transport on vehicles where the load space is not separated from the driver's compartment.</p> <p>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.</p> <p>Before transporting product containers ensure that they are firmly secured and:</p> <ul style="list-style-type: none"> <li>- cylinder valve is closed and not leaking</li> <li>- valve outlet cap nut or plug (where provided) is correctly fitted</li> <li>- valve protection device (where provided) is correctly fitted</li> <li>- adequate ventilation.</li> <li>- compliance with applicable regulations.</li> </ul>

## 15 REGULATORY INFORMATION

<b>Number in Annex I of Dir 67/548</b>	Not applicable for preparations.
<b>EC Classification</b>	Not classified as dangerous substance
<b>Labelling of cylinders - Symbols</b>	Label 2.2: non flammable non toxic gas

## CYLINDER CHARACTERISTICS

Cylinder Size	Maximum Filled Pressure at 15°C (bar)	Approx. Dimensions incl. valve and guard where supplied (mm)	Approx. Gross Weight (kg)	Manifolded Cylinder Pallets (MCPs)	Maximum Filled Pressure (bar)	Approx. Dimensions incl. valve and guard where supplied (mm)	Max. Gross Weight (kg)
N	200	1460 x 230	85	WN	200	1290 x 1810 x 840	1500

**OUTLET CONNECTION:** 5/8" left hand BS341 No4.



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All BOC Safety Data Sheets are available online at [www.boc.com/uk/sds](http://www.boc.com/uk/sds)

## For product and safety enquiries please phone

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**0800 111 333**

**BOC Customer Service Centre**  
**Priestley Road, Worsley**  
**Manchester M28 2UT**  
**Fax: 0800 111 555**

**In the Republic of Ireland:**  
**1850 333 435**

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

## 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.

Before using this product in any new process or experiment, a thorough material compatibility and safety study should be carried out.

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 "Safe handling, storage and transport of industrial gas cylinders", both of which are available from your local BOC outlet.

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.