

Argoshield

Light • Universal • Heavy

PRODUCT: ARGOSHIELD LIGHT • UNIVERSAL • HEAVY MSDS NR: 300-15-0006 BOC VERSION: 3.03 DATE: 17/08/06 PAGE: 1/2
FORMERLY: ARGOSHIELD 5/TC/20

1 IDENTIFICATION OF THE SUBSTANCE/ PREPARATION AND OF THE COMPANY

Product name Argoshield 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 Preparation
Components/Impurities Contains the following components:
Carbon Dioxide (EINECS No. 204-696-9)
Oxygen (O;R8) (EINECS No. 231-956-9)
Argon (EINECS No. 231-147-0)
Specific compositions:
Argoshield Light 5% CO₂ 2% O₂ balance Ar
Argoshield Universal 12% CO₂ 2% O₂ balance Ar
Argoshield Heavy 20% CO₂ 2% O₂ balance Ar
EEC Nr (from EINECS) Not applicable for preparations.

3 HAZARDS IDENTIFICATION

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

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 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. Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe. Post warning notices. Ensure adequate air ventilation.
Environmental precautions Try to stop release. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.
Clean up methods 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

Exposure limit value for country UK: Carbon dioxide – LTEL 5000ppm; STEL 15000ppm (EH40/2002)
Personal protection Ensure adequate ventilation.

9 PHYSICAL AND CHEMICAL PROPERTIES

Relative density, gas Heavier than air
Solubility mg/l water Not known
Appearance/Colour Colourless gas
Odour None
Other data Gas/vapour heavier than air. May accumulate in confined spaces, particularly at or below ground level. Will displace oxygen when ventilation is at high point only.

10 STABILITY AND REACTIVITY

Stability and reactivity Stable under normal conditions.

11 TOXICOLOGICAL INFORMATION

General High concentrations cause rapid circulatory insufficiency. Symptoms are headache, nausea and vomiting, which may lead to unconsciousness.
In a confined space, displacement of air by Argoshield may cause the exposure limits to be exceeded before the oxygen level drops below 18%.

SAFETY DATA SHEET

12 ECOLOGICAL INFORMATION

General CO₂ – 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. (Argon, Carbon Dioxide)

UN Nr 1956

Class 2.2

ADR/RID Classification Code IA

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 preparations.

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 carriage of gas cylinders on vehicles", both of which are available from your local BOC outlet.

CYLINDER CHARACTERISTICS

Cylinder size	Maximum Filled Pressure at 15°C (bar)	Approx. Dimensions incl. valve and guard where supplied (mm)	Approx. Full Cylinder weight (kg)	Manifolded Cylinder Pallets (MCP's)	Maximum Filled Pressure at 15°C (bar)	Approx. Dimensions incl. cylinders (mm)	Max. Gross Weight (kg)
X	230	940 x 140	19	WW (15 x W)	230	1290 x 1810 x 840	1500
Y	230	930 x 203	41				
W	230	1460 x 230	86				

OUTLET CONNECTION: 5/8" BSP female right hand cone recessed.



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