COSHH ASSESSMENT NUMBER 076

Substance name: Argon, compressed  
Assessed by: Rodrigo De Melo  
Assessment date: 01/12/17

Emergency Contact: 0800 111 333

HAZARD CLASSIFICATION

Gas under pressure

Hazard Statements/Risk Phrase
H280 - Contains gas under pressure; may explode if heated.

Precautionary Statements/Safety Phrases
P403 - Store in a well-ventilated place.

ASSESSMENT

Description of the work area and/or process activity
Use of gas cylinders for welding operations.

Persons affected: Welders

Quantity to be used: 10kg  
Number of times per day: 5  
Duration of the task each time: 30 minutes

Substance category N/A  
Not within the scope of COSHH essentials
The Abbey Pynford Group of Companies
Integrated Management System

CONTROL MEASURES

Measures that are or must be put in place to control the use of the substance

Keep self contained breathing apparatus readily available for emergency use.

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. Oxygen detectors should be used when asphyxiating gases may be released. Systems under pressure should be regularly checked for leakages. Do not eat, drink or smoke when using the product.

Only experienced and properly instructed persons should handle gases under pressure. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Refer to supplier's handling instructions. The substance must be handled in accordance with good industrial hygiene and safety procedures. Protect containers from physical damage; do not drag, roll, slide or drop. Do not remove or deface labels provided by the supplier for the identification of the container contents. When moving containers, even for short distances, use appropriate equipment eg. trolley, hand truck, fork truck etc. Secure cylinders in an upright position at all times, close all valves when not in use. Provide adequate ventilation. Suck back of water into the container must be prevented. Do not allow backfeed into the container. Avoid suckback of water, acid and alkalis. Keep container below 50°C in a well ventilated place. Observe all regulations and local requirements regarding storage of containers. When using do not eat, drink or smoke. Store in accordance with local/regional/national/international regulations. Never use direct flame or electrical heating devices to raise the pressure of a container. Leave valve protection caps in place until the container has been secured against either a wall or bench or placed in a container stand and is ready for use. Damaged valves should be reported immediately to the supplier Close container valve after each use and when empty, even if still connected to equipment. Never attempt to repair or modify container valves or safety relief devices. Replace valve outlet caps or plugs and container caps where supplied as soon as container is disconnected from equipment. Keep container valve outlets clean and free from contaminates particularly oil and water. If user experiences any difficulty operating container valve discontinue use and contact supplier. Never attempt to transfer gases from one container to another. Container valve guards or caps should be in place.

Do not eat, drink or smoke when using the product.

Specific PPE requirements

Guideline: EN 166 Personal Eye Protection.
Guideline: EN 388 Protective gloves against mechanical risks.
Guideline: ISO 20345 Personal protective equipment - Safety footwear.

What to do in the event of a spillage

Evacuate area. Provide adequate ventilation. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous. Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe. Guideline EN 137 Respiratory protective devices - Self-contained open-circuit compressed air breathing apparatus with full face mask - Requirements, testing, marking.

Prevent further leakage or spillage if safe to do so.
Disposal
Do not discharge into any place where its accumulation could be dangerous. Vent to atmosphere in a well ventilated place.

How to store the substance
Containers should not be stored in conditions likely to encourage corrosion. Stored containers should be periodically checked for general conditions and leakage. Container valve guards or caps should be in place. Store containers in location free from fire risk and away from sources of heat and ignition. Keep away from combustible material.

Specific training required
Manual handling.
COSHH awareness.
Pressure systems awareness.

EMERGENCY RESPONSE

FIRE

Suitable fire extinguishers

In the event of a fire
Heat may cause the containers to explode.

Material will not burn. In case of fire in the surroundings: use appropriate extinguishing agent.

In case of fire: Stop leak if safe to do so. Continue water spray from protected position until container stays cool. Use extinguishants to contain the fire. Isolate the source of the fire or let it burn out.
FIRST AID

First aid measures in the event of:

**Eye Contact**
Adverse effects not expected from this product.

**Skin Contact**
Adverse effects not expected from this product.

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

**Inhalation**
In high concentrations may cause asphyxiation. 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.

Additional comments:
In high concentrations may cause asphyxiation. 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.

Most important symptoms and effects, both acute and delayed: Respiratory arrest.

RESIDUAL RISK

Residual risk after control measures

Medium

Assessment based on the following Material Safety Datasheets:
MSDS076 - BOC Argon Cylinder.pdf