

**PRODUCT:** IG-55  
Version: 1.0 Date: March 26, 2007

**IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY**

Product Name IG-55  
Chemical Formula N<sub>2</sub> / Ar  
Company Identification Local filling station  
Emergency Phone Numbers Local filling station

**COMPOSITION / INFORMATION ON INGREDIENTS**

Substance / Preparation Preparation  
Components / Impurities Contains no components or impurities which will influence the classification of the product  
CAS No. N/A  
EEC No. N/A  
IG-55 Specifications Mixture of 50% - 52% N<sub>2</sub> and 48% - 50% Ar.  
H<sub>2</sub>O ≤ 10ppm O<sub>2</sub> ≤ 10ppm in base components.

**HAZARDS IDENTIFICATION**

Hazards Identification In high concentrations may cause asphyxiation.  
Compressed gas.

**FIRST AID MEASURES**

Inhalation In high concentrations may cause asphyxiation at high concentrations. Symptoms may include loss of mobility / consciousness. Victim may not be aware of asphyxiation. Remove victim to an uncontaminated area, wearing self-contained breathing apparatus. Keep person warm and at rest. Seek medical assistance. Apply artificial respiration if breathing has stopped.

Skin / eye contact Compressed gas directed at the skin can enter the body through small wounds or can even penetrate the skin, causing serious or fatal injuries. Seek medical advice immediately.

Ingestion Ingestion is not considered a potential route of exposure.

**FIRE FIGHTING MEASURES**

Specific Hazards	Exposure to fire may cause cylinders to rupture / explode. Call the Fire Department Non flammable.
Hazardous combustion products	None.
Suitable extinguishing media	All known extinguishants can be used.
Specific methods	If possible, stop flow of product. Move cylinder away or cool with water from a protected position.
Special protective equipment for fire fighters	In confined spaces use self-contained breathing apparatus.

**ACCIDENTAL RELEASE MEASURES**

Personal precautions	Evacuate area. Use self-contained breathing apparatus when entering area unless atmosphere is proved safe. Ensure adequate air ventilation.
Environmental precautions	Provided it is safe to do so, try to stop release. Prevent from entering sewers, basements, and work pits or any place where accumulation can be dangerous.
Clean up methods	Ventilate area.

**HANDLING AND STORAGE**

Handling and Storage	Backflow of any contaminating substance into cylinder must be prevented. Use only equipment specified as suitable for this product, its supply pressure and temperature. Contact your supplier if in doubt. Compressed gas cylinders are heavy and contain considerable stored energy. Use suitable equipment and handle with appropriate caution. Refer to suppliers. Keep cylinders below 122°F (50°C) in a well-ventilated place.
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**EXPOSURE CONTROLS / PERSONAL PROTECTION**

Exposure Limit Value – ELV	No ELV specified, but atmosphere must have minimum 18% free oxygen
Personal Protection	Ensure adequate air ventilation.

**PHYSICAL AND CHEMICAL PROPERTIES**

Molecular weight	33.95
Melting point	-327.46°F (-199.7°C)
Boiling point	-310.18°F (-190.1°C)
Critical temperature	-210.46°F (-134.7°C)
Relative density gas	Heavier than air
Relative density liquid	N/A
Vapor pressure 20°C	N/A
Solubility in water	Negligible
Appearance / color	Colorless gas
Odor	No odor warning properties
Auto ignition temperature	Not applicable
Flammability range	Non flammable
Other data	Vapor is heavier than air. May accumulate in confined spaces, particularly at or below ground level.

**STABILITY AND REACTIVITY**

Stability and Reactivity                      Stable under normal conditions.

**TOXICOLOGICAL INFORMATION**

General    No toxicological effects from this product.  
LC50/ ih (ppm)                                  No acute toxicity

**ECOLOGICAL INFORMATION**

General    No ecological damage is caused by this product.  
Nitrogen and Argon are natural components of air. Nitrogen constituting approximately 78% and Argon approximately 0.9% of the earth's atmosphere.

**DISPOSAL CONSIDERATIONS**

General    To atmosphere in well ventilated area. Consider noise and pressure hazards. Do not discharge into any place where its accumulation could be dangerous.  
Contact your Fike Corporation supplier if guidance is required.

**TRANSPORT INFORMATION**

UN No.	1956
Class / Div.	2.2
Emergency Action Code	None specified
ADR / RID ITEM No. 1	2.1a
IMDG page	2141
IMO	EMS 2 – 04
ADR / RID Hazard No.	Not specified
Labelling ADR	Non flammable non-toxic gas.
Other transport information	Avoid transport on vehicles where the loads 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 at an emergency.  Before transporting product cylinders ensure: <ul style="list-style-type: none"><li>- Cylinder valve is closed and not leaking</li><li>- Valve outlet cap or plug (where provided) is correctly fitted</li><li>- Adequate ventilation</li><li>- Compliance with applicable regulations.</li></ul>

**REGULATORY INFORMATION**

Number in annex 1 of Dir. 67/548	Not included in Annex 1.
EC Classification	Not classified as a dangerous substance.
EC Labeling (Symbols, R & S phrases)	
- Symbols	Compressed gas.
- Risk Phrases	Asphyxiate in high concentrations.
- Safety Phrases	Do not breathe the gas. Keep cylinders in a well-ventilated place.

**OTHER INFORMATION**

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 in this document are believed to be correct at present. While great care has been taken in the preparation of this information, no liability for injury, damage or non-compliance with any legislation or directive arising from its use can be accepted.

This sheet does not constitute or substitute for the user's own assessment of workplace risk as required by other health and safety legislation.