

Material Safety Datasheet

INERTECH™ Gaseous Fire Suppression System



IG-541 Safety Information

Product: IG-541

IDENTIFICATION FOR THE SUBSTANCE/PREPARATION AND COMPANY

Product name	Intertech IG-541
Synonyms	IG-541
Chemical Formula	N2/Ar/CO2
Company identification	Firetec System Ltd. Unit 6, The Business Centre Wokingham, Berkshire, RG41 2QZ sales@firetec-systems.com
Emergency Phone Number	+44 (0)1118 989 7910

COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Preparation	Fire extinguishing agent
Components/Impurities	Contains no components or impurities which will influence the classification of the product
No.	N/A
No.	N/A
Specification IG-100	Gas Mixture with: 50 Vol. % Nitrogen (N2), 42 Vol. % Argon (Ar), 8 Vol. % Carbon dioxide (CO2)

HAZARD IDENTIFICATION

Hazard Identification	In high concentrations may cause asphyxiation Compressed gas
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FIRST AID MEASURES

Inhalation	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 victim warm and at rest. Seek medical assistance. Apply artificial respiration if breathing has stopped.
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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 containers to rupture/explode. Call the Fire Department. Nonflammable.

Hazardous combustion products

None

Suitable extinguishing media

All known extinguishants can be used

Specific methods

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

No impact to the environment

Clean-up methods

Ventilate area

HANDLING AND STORAGE

Handling and storage

Use only equipment, which is 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 containers below 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 a minimum 18% free oxygen

Personal Protection

Ensure adequate air ventilation

PHYSICAL AND CHEMICAL PROPERTIES

Relative density gas

Heavier than air

Relative density liquid

N/A

Vapour pressure 20°C

N/A

Solubility in water

Colourless gas

Appearance/colour

No odour warning properties

Oudor

N/A

Auto ignition temperature

Non flammable

Flammability range

Vapour is heavier than air. May accumulate in confined spaces, particularly at or below ground level

Other data

Stable under normal conditions

STABILITY AND REACTIVITY

Stability and Reactivity

Asphyxiant in high concentrations

TOXICOLOGICAL 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.

ECOLOGICAL INFORMATION

General

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 supplier if guidance is required.



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TRANSPORT INFORMATION

UN No.	1956
ADR/RID ITEM No. 1	2.1a
IMDG/GGV Sea-class 2	UNI956, page 2124
ADR/RID Hazard No.	Not specified
Labelling ADR	Non-flammable non-toxic gas

REGULATORY INFORMATION

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

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. Whilst 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 users own assessment of workplace risk as required by other health and safety legislation.