

Material Safety Datasheet

INERTECH™ Gaseous Fire Suppression System



IG-100 Safety Information

Product: IG-55

IDENTIFICATION FOR THE SUBSTANCE/PREPARATION AND COMPANY

| | |
|------------------------|---|
| Product name | Intertech IG-100 |
| Synonyms | IG-100 |
| Chemical Formula | N ₂ |
| 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 of 100% Nitrogen (N ₂) H ₂ O < 10ppm O ₂ < 10ppm in base component |

HAZARD IDENTIFICATION

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

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| 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

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| 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

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| Relative density gas | 0.98 (air = 1) N/A |
| Relative density liquid | N/A |
| Vapour pressure 20°C | Negligible |
| Solubility in water | Colourless gas |
| Appearance/colour | No odour warning properties |
| Odour | 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 | |

STABILITY AND REACTIVITY

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|--------------------------|--------------------------------|
| Stability and Reactivity | Stable under normal conditions |
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TOXICOLOGICAL INFORMATION

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|---------|-----------------------------------|
| General | Asphyxiant in high concentrations |
|---------|-----------------------------------|

ECOLOGICAL INFORMATION

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| 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. |
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DISPOSAL CONSIDERATIONS

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| 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

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|--------------------|-----------------------------|
| UN No. | 1066 |
| ADR/RID ITEM No. 1 | 2.2 |
| ADR/RID Hazard No. | Not specified |
| Labelling ADR | Non-flammable non-toxic gas |

REGULATORY INFORMATION

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| 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.