



Safety Data Sheet

This safety data sheet complies with the requirements of: Regulation (EC) No. 1907/2006

Product name IG-100

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product Identifier

Product code 73122020
Product name IG-100

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use No information available
Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Company Name Tyco Fire Suppression & Building Products
1 Kopersteden
TJ Enschede, Netherlands
Telephone: 3153-428-4444

For further information, please contact

psra@tycofp.com

1.4. Emergency telephone number

CHEMTREC 001-800-424-9300 or 001-703-527-3887

National Poisons Information Centre (NPIC)
+353-1809 2566

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Gases Under Pressure - Compressed Gas -(H280)

2.2. Label Elements



Signal Word
WARNING

Hazard Statements

H280 - Contains gas under pressure; may explode if heated

Precautionary Statements

P410 + P403 - Protect from sunlight. Store in a well-ventilated place

2.3. Other Hazards

May displace oxygen and cause rapid suffocation.

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not Applicable

3.2 Mixture

Chemical name	Index No	EC No	CAS No	weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
Nitrogen		231-783-9	7727-37-9	90 - 100%	Press. Gas (H280)	no data available

Full text of H- and EUH-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Remove to fresh air. If breathing is difficult, give oxygen. (Get medical attention immediately if symptoms occur.).
Skin contact	Wash skin with soap and water. Get medical attention if irritation develops and persists.
Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor.
Ingestion	Rinse mouth. Do not induce vomiting without medical advice. If swallowed, call a poison control centre or physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms	Unconsciousness.
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4.3. Indication of any immediate medical attention and special treatment needed

Note to doctors Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

None

5.2. Special hazards arising from the substance or mixture

None known.

Hazardous Combustion Products

Carbon oxides. Fluorinated oxides. Nitrogen oxides (NOx). Oxides of sulphur.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation, especially in confined areas.

Use personal protection recommended in Section 8.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Pick up and transfer to properly labelled containers.

6.4. Reference to other sections

See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid contact with skin and eyes. Handle in accordance with good industrial hygiene and safety practice.

General hygiene considerations

Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

Specific Use(s)

Fire extinguishing agent.

Risk Management Methods (RMM)

The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering controls Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/Face Protection

Avoid contact with eyes. Tight sealing safety goggles.

Hand protection

Wear protective natural rubber, nitrile rubber, Neoprene™ or PVC gloves. Gloves must conform to standard EN 374.

Skin and Body Protection

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory Protection

In case of insufficient ventilation, wear suitable respiratory equipment. Wear a respirator conforming to EN 140 with Type A filter or better.

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State	Compressed Gas	Colour	Colourless
Odour	None		
Odour Threshold	No data available		

Property

Values

Remarks • Method

pH

Melting Point / Freezing Point

No data available

No data available

Boiling point / boiling range

-2 °C

Flash Point

No data available

Evaporation Rate

No data available

Flammability (solid, gas)	No data available
Flammability limit in air	No data available
Upper flammability limit:	No data available
Lower flammability limit:	No data available
Vapour Pressure	No data available
Vapour Density	No data available
Specific gravity	No data available
Water Solubility	No data available
solubility(ies)	No data available
Partition coefficient	No data available
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Kinematic viscosity	No data available
Dynamic viscosity	No data available
Explosive Properties	No data available
Oxidising Properties	No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

None under normal processing.

Hazardous Polymerisation

Hazardous polymerisation does not occur.

10.4. Conditions to avoid

Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Strong oxidising agents. Strong acids. Strong bases.

10.6. Hazardous decomposition products

Carbon oxides. Nitrogen oxides (NO_x). Oxides of sulphur. Fluorinated oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute Toxicity

Product information

Inhalation	In high concentration the gas may cause a suffocation. Victim may not be aware of asphyxiation. In confined or poorly ventilated areas, vapours can readily accumulate and can cause unconsciousness and death.
Eye Contact	Contact with product may cause frostbite.
Skin contact	Contact with product may cause frostbite.

Ingestion

Not an expected route of exposure.

Unknown Acute Toxicity

100% of the mixture consists of ingredient(s) of unknown toxicity.

Skin Corrosion/Irritation

No information available.

Serious eye damage/eye irritation

No information available.

Sensitisation

No information available.

Germ Cell Mutagenicity

No information available.

Carcinogenicity

No information available.

Reproductive Toxicity

Lack of oxygen during pregnancy has produced developmental abnormalities in humans and experimental animals.

STOT - Single Exposure

No information available.

STOT - Repeated Exposure

No information available.

Symptoms

Unconsciousness.

Aspiration Hazard

No information available.

SECTION 12: Ecological information**12.1. Toxicity**

None known.

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects

No information available

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Waste from Residues/Unused Products

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging

Do not re-use container.

SECTION 14: Transport information**IMDG**

14.1 UN/ID no	UN1066
14.2	
Proper Shipping Name	Nitrogen, compressed
14.3 Hazard class	2.2
14.4 Packing group	NOT REGULATED
Description	UN1066, Nitrogen, compressed, 2.2
14.5	
14.6 Special Provisions	None
EmS-No	F-C, S-V
14.7 Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC CODE	No information available

RID

14.1 UN/ID no	UN1066
14.2	
Proper Shipping Name	Nitrogen, compressed
14.3 Hazard class	2.2
Labels	2.2 (+13)
14.4 Packing group	NOT REGULATED
Description	UN1066, Nitrogen, compressed, 2.2 (13)
14.5 Environmental Hazard Classification Code	Not Applicable 1A
14.6 Special Provisions	None

ADR

14.1 UN/ID no	UN1066
14.2	
Proper Shipping Name	Nitrogen, compressed
14.3 Hazard class	2.2
Labels	2.2
14.4 Packing group	NOT REGULATED
Description	UN1066, Nitrogen, compressed, 2.2, (E)
14.5 Environmental Hazard	Not Applicable
14.6 Special Provisions	None
Classification Code	1A
Tunnel restriction code	(E)

ICAO (air)

14.1 UN/ID no	UN1066
14.2	
Proper Shipping Name	Nitrogen, compressed
14.3 Hazard class	2.2
14.4 Packing group	NOT REGULATED
Description	UN1066, Nitrogen, compressed, 2.2
14.5 Environmental Hazard	Not Applicable
14.6 Special Provisions	None

IATA

14.1 UN/ID no	UN1066
14.2	
Proper Shipping Name	Nitrogen, compressed
14.3 Hazard class	2.2
14.4 Packing group	NOT REGULATED
Description	UN1066, Nitrogen, compressed, 2.2
14.5 Environmental Hazard	Not Applicable
14.6 Special Provisions	None
ERG Code	2L

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Germany

Water hazard class (WGK) Not defined

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not Applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009 Not Applicable

International Inventories

TSCA	Complies
DSL/NDSL	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

**SECTION 16: Other information****Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of H-Statements referred to under section 3**

H280 - Contains gas under pressure; may explode if heated

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend SECTION 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Revision date 23-Feb-2018**Revision note** Not Applicable.**This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006****Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet