# Safety Data Sheet

SPIROMEC AB

According to Regulation (EC) No. 1907/2006 annex II and EC/2020/878

# IG100 Nitrogen



Date of issue: 2025-01-20 Version 1

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

| | |
|---|---|
| **1.1 Product identifier** | IG100 Nitrogen |
| **CAS-nr** | 7727-37-9 |
| **EG-nr** | 231-783-9 |
| **UFI** | - |
| **1.2 Relevant identified uses of the substance or mixture and uses advised against** | Fire Extinguishing Agents<br>Industrial Use |
| **1.3 Details of the supplier of the safety data sheet** | Spiromec AB<br>Molijns väg 11<br>589 41 Linköping |
| **Telephone** | + 46 (0)13-36 26 60 |
| **Homepage/E-mail** | spiromec@spiromec.se |
| **Emergency telephone** | For poison information call, NHS 111 (England), NHS 24 (Scotland) or NHS Direct (Wales), in emergencies call 999. |

## SECTION 2: Hazards identification

**2.1 Classification of the substance or mixture:**
Classification CLP (1272/2008/EC)
Press. Gas (Comp.); H280
**2.2 Label elements:**
**Pictogram**

**Signal Word**
Warning

**Containing substances**
Nitrogen
**Hazard statement Code(s)**
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**
The product is not considered to contain substances that meet the criteria for classification as PBT or vPvB substances in concentrations ≥ 0.1%
Does not contain an endocrine disruptor (EDC) in a concentration of ≥ 0.1%.
High concentrations can displace the normal air and cause suffocation from lack of oxygen.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

| Components | CAS-No<br>EC-No<br>Reg-No | Conc.<br>% | Hazard Class and Category Code(s) | Hazard statement Code(s)* |
|---|---|---|---|---|
| Nitrogen | 7727-37-9<br>231-783-9 | 100 | Press. Gas. | H280 |

* The full text of Hazard statement Codes are listed under section 16.
Ingredients not listed are classified as non-hazardous or at a concentration below reportable levels.
The classification is based on information from the chemical supplier and http://echa.europa.eu (Databases)

## SECTION 4: First aid measures

### 4.1 Description of first aid measures:

**General Information**
In all cases of doubt, or when symptoms persist, seek medical advice.
**Inhalation**
Fresh air. Contact a doctor if the complaints persist.
**Skin contact**
Warm the affected body part in lukewarm water if frostbite has occurred. DO NOT use hot water.
Frostbite should be treated by a doctor.
**Eye contact**
Rinse with lukewarm water for several minutes. Hold eyelids apart. Remove contact lenses, if present and easy to do. Contact a doctor if the complaints persist.
**Ingestion**
Rinse mouth and immediately give plenty of water or milk to drink. Seek medical advice.

### 4.2 Most important symptoms and effects, both acute and delayed:

**Inhalation:** High concentrations can displace the normal air and cause suffocation from lack of oxygen.
**Skin contact:** Contact with rapidly expanding gas may cause frostbite.
**Eye contact:** May be slightly irritating to eyes. (Pain, redness) frostbite
**Ingestion:** Ingestion may cause discomfort and vomiting.

### 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

The product is not flammable. The product is an extinguishing agent.

### 5.2 Special hazards arising from the substance or mixture

Containers may burst or explode when heated, due to rapid pressure build-up.
Do not breathe fumes. During fire, gases hazardous to health may be formed.

### 5.3 Advice for firefighters

Appropriate breathing apparatus and protective suites may be required.

**Additional information**
Cool endangered containers with water in case of fire. Move containers from fire area if it can be done without risk.

## SECTION 6: Accidental release measures

**6.1 Personal precautions, protective equipment and emergency procedures**
Avoid contact with skin and eyes.
Ensure good ventilation.
Use breathing apparatus when oxygen levels are low or unknown.
Keep unauthorized and unprotected people at a safe distance.
**6.2 Environmental precautions**
Should be prevented from entering sewer systems, basements and pits, or other places where gas accumulation could be dangerous.
**6.3 Methods and material for containment and cleaning up**
Evacuate the area and ventilate the gas. Let the gas from the leaking gas cylinders evaporate outdoors.
**6.4 Reference to other sections**
For handling and storage, see section 7.
For personal protection, see section 8.
Collected waste is placed in closed metal containers and disposed of as waste according to section 13.

## SECTION 7: Handling and storage

**7.1 Precautions for safe handling**
Normal precautions taken when handling chemicals should be observed.
Use only with compatible and approved equipment.
Check pipes and shut-off valves regularly for gas leakages.
Only experienced and properly instructed persons may handle compressed gas.
Use only correctly specified Pressure container: must not be punctured or burned, even when empty. Protect from sunlight. Must not be exposed to temperatures exceeding 50 °C.
Use recommended safety equipment
Do not eat, drink or smoke in areas where this product is handled.
Protect gas cylinders from physical damage; you must not pull, roll, slip or overturn gas cylinder. Use trolleys that are intended for gas cylinders even if the gas cylinder is only moved for short distance
**7.2 Conditions for safe storage, including any incompatibilities**
The product should be stored in a manner which prevents hazards to health and the environment.
Store tightly, in original packaging.
Store in a well-ventilated space.
**7.3 Specific end use(s)**
-

## SECTION 8: Exposure controls/personal protection

**8.1 Control parameters**
**Appropriate engineering controls**
Provide adequate ventilation.
**Exposure limits**
**Swedish limit values or limit values according to the European commission:**
None established

**British limit values (EH40/2005 Workplace exposure limits)**
None established

## SECTION 8: Exposure controls/personal protection

**DNEL**
No known.
**PNEC**
No known.

**8.2 Exposure controls:**
**General protective and hygiene measures**
Wash hands before breaks and at the end of work.
Handle in accordance with good industrial hygiene and safety practice.
Escaping gas can cause severe cold.
**Individual protection measures, such as personal protective equipment:**
Always consult a competent person/supplier when selecting personal protective equipment.
**Respiratory protection**
Oxygen monitors should be used since suffocating gases may be released.
**Hand protection**
Use protective gloves that meet the standard EN374, breakthrough time at least 280 minutes, if there is a risk of direct contact. Gloves that protect against cold are recommended. Use protective leather gloves
When selecting gloves, several parameters should be taken into account, use, handling, breakthrough time.
**Eye protection**
Wear tightly fitting protective goggles if there is a risk of contact with eyes.
**Clothing requirements**
Normally not needed

## SECTION 9: Physical and chemical properties

**9.1 Information on basic physical and chemical properties**

| | |
|---|---|
| **Physical state:** | Gas |
| **Colour:** | Colourless |
| **Odour** | Odourless |
| **Melting point/freezing point (°C):** | Not determined |
| **Boiling point or initial boiling point and boiling range** | Not determined |
| **Flammability** | Not determined |
| **Lower and upper explosion limit** | Not determined |
| **Flash point (°C):** | Not determined |
| **Auto-ignition temperature** | Not determined |
| **Decomposition temperature** | Not determined |
| **pH** | Not determined |
| **Kinematic viscosity** | Not determined |
| **Solubility** | Not determined |
| **Partition coefficient n-octanol/water (log value)** | Not determined |
| **Vapour pressure** | Not determined |
| **Density and/or relative density** | 1,18 Air = 1. |
| **Relative vapour density** | Not determined |
| **Particle characteristics** | Not determined |

**9.2 Other information:** No specific.

## SECTION 10: Stability and reactivity

**10.1 Reactivity**
Stable under recommended storage and handing conditions.
**10.2 Chemical stability**
The product is stable.
**10.3 Possibility of hazardous reactions**
No known.
**10.4 Conditions to avoid**
Protect from heat and direct sunlight.
**10.5 Incompatible materials**
No known.
**10.6 Hazardous decomposition products**
No known.

## SECTION 11: Toxicological information

**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
See section 4. (Most important symptoms and effects, both acute and delayed)
**Irritating/corrosive properties**
Not classified as irritating/corrosive according to CLP.
**Acute toxicity**
Not classified as acutely toxic according to CLP.

**Toxicology data**
Information about this preparation is not available.

**Specific organtoxicitet STOT-single exposure -repeated exposure**
No known.
**Routes of exposure:**
Eyes and skin, ingestion, inhalation.
**Allergenic potential**
The product is not classified as allergenic by inhalation or skin contact.
**Carcinogenicity, mutagenicity and toxicity for reproduction**
This product is not classified as carcinogen, mutagen or toxic for reproduction.
**Aspiration hazard**
No
**11.2 Information on other hazards**
Does not contain an endocrine disruptor (EDC) in a concentration of ≥0.1%.
Risk of frostbite.
Please note that if large quantities are inhaled, there is a risk of suffocation due to lack of oxygen.

## SECTION 12: Ecological information

This product is not classified as dangerous for the environment.
Do not flush into surface water or sanitary sewer system.

**12.1 Toxicity**
Information about this preparation is not available.

**12.2 Persistence and degradability**
No information available.

**12.3 Bioaccumulative potential**
No information available.

**12.4 Mobility in soil**
Evaporates quickly in air.

**12.5 Results of PBT and vPvB assessment**
This product is not considered to contain any substances that meet the criteria for classification as PBT or vPvB substances.

**12.6 Endocrine disrupting properties**
Does not contain an endocrine disruptor (EDC) in a concentration of ≥0.1%.

**12.7 Other adverse effects**
No known.

## SECTION 13: Disposal considerations

**13.1 Waste treatment methods:**

**The product**
Dispose of in accordance with local authority requirements. Do not empty into drain.
Hazardous waste.

**Disposal of Packaging**
Empty and cleaned packaging can be recycled.

## SECTION 14: Transport information

The product are classified as dangerous goods according to ADR/RID, IMDG, IATA-DGR.

**14.1 UN number or ID number**
1066

**14.2 UN proper shipping name**
NITROGEN, COMPRESSED

**14.3 Transport hazard class(es)**
2

**14.4 Packing group**
-

**14.5 Environmental hazards**
Marine Pollutant: No

**14.6 Special precautions for user**
-

**14.7 Maritime transport in bulk according to IMO instruments**
-

**Tunnelcategory:**
E

**LQ**
120 ml

## SECTION 15: Regulatory information

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
Classification according to Regulation (EC) No. 1907/2006 annex II and EC/2020/878. EH40/2005.
**(EU) REACH Annex XVII**
None listed.
**(EU) Candidate List of substances of very high concern**
None listed.
**(EU) REACH Annex XIV**
None listed.
**15.2 Chemical safety assessment**
For this product a chemical safety assessment was not carried out.

## SECTION 16: Other information

**The full text of Hazard statement Codes listed under section 3**
H280 Contains gas under pressure; may explode if heated

**Version 1:** 2025-01-20
Safety data sheet according to Regulation (EC) No. 1907/2006 annex II and EC/2020/878.

**Sources**
Safety data sheet provided by the manufacturer.
CLP-regulation, www.kemi.se, EH40/2005. www.echa.europa.eu (Databases)

**Explanation of abbreviations**
BCF: Bio Concentration Factor.
CAS-nr: Chemical Abstracts Service number
$EC_{50}$: Effect Concentration
IMDG: International Maritime Dangerous Goods Code.
$LC_{50}$: Lethal Concentration
$LD_{50}$: Lethal Dose
NOEC: No Observed Effect Concentration
PBT- substances: Persistent, Bio accumulative and Toxic substances.
vPvB- substances: Very persistent and Very Bio accumulative substances.