



# SAFETY DATA SHEET

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Revised edition no : 2

Date : 30/6/2004

Supersedes : 30/6/2004

**NITROGEN****089A\_ENG**

## 1 IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

**Trade name** : Not applicable.  
**Identification of the product** : NITROGEN  
**MSDS No** : 089A\_ENG  
**Use** : Chemical applications.  
Industrial applications.  
**Chemical formula** : N<sub>2</sub>  
**Company identification** : SAPIO PRODUZIONE IDROGENO OSSIGENO S.R.L.  
via Silvio Pellico 48  
20052 MONZA (MI) Italia  
Tel. 0398398.1  
**Emergency phone nr** : See heading and/or footer.

## 2 COMPOSITION / INFORMATION ON INGREDIENTS

**Substance / Preparation** : Substance.  
Nitrogen  
CAS No :007727-37-9  
EC No :231-783-9  
Index No :---

Contains no other components or impurities which will influence the classification of the product.

## 3 HAZARDS IDENTIFICATION

**Hazards identification** : Compressed gas.  
In high concentrations may cause asphyxiation.

## 4 FIRST AID MEASURES

**First aid measures** : Call an emergency phone number  
**- Inhalation** : In high concentrations may cause asphyxiation. Symptoms may include loss of mobility/consciousness. Victim may not be aware of asphyxiation.  
Remove victim to uncontaminated area wearing self contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.  
**- Skin/eye contact** : No effect on living tissue.  
**- Ingestion** : Ingestion is not considered a potential route of exposure.

## 5 FIRE-FIGHTING MEASURES

**Flammable class** : Non flammable.  
**Specific hazards** : Exposure to fire may cause containers to rupture/explode.  
**Hazardous combustion products** : None.  
**Extinguishing media**  
**- Suitable extinguishing media** : All known extinguishants can be used.  
**Specific methods** : If possible, stop flow of product.  
Move away from the container and cool with water from a protected position.  
**Special protective equipment for fire fighters** : In confined space use self-contained breathing apparatus.

## 6 ACCIDENTAL RELEASE MEASURES

**Personal precautions** : Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe.  
Evacuate area.  
Ensure adequate air ventilation.  
**Environmental precautions** : Try to stop release.



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### 6 ACCIDENTAL RELEASE MEASURES (continued)

Clean up methods : Ventilate area.

### 7 HANDLING AND STORAGE

**Storage** : Keep container below 50°C in a well ventilated place.

**Handling** : Suck back of water into the container must be prevented.  
Do not allow backfeed into the container.  
Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt.  
When using do not smoke.  
While moving the container, wear appropriate protective garment.  
Refer to supplier's container handling instructions.

### 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

**Personal protection** : Ensure adequate ventilation.

- **Respiratory protection** : Keep self contained breathing apparatus readily available for emergency use.

- **Hand protection** : Wear suitable gloves.

- **Eye protection** : Wear safety glasses.

### 9 PHYSICAL AND CHEMICAL PROPERTIES

**Physical state at 20 °C** : Compressed gas.

**Colour** : Colourless gas.

**Odo(u)r** : No odour warning properties.

**Molecular weight** : 28

**Melting point [°C]** : -210

**Boiling point [°C]** : -196

**Critical temperature [°C]** : -147

**Vapour pressure, 20°C** : Not applicable.

**Relative density, gas (air=1)** : 0.97

**Relative density, liquid (water=1)** : Not applicable.

**Solubility in water [mg/l]** : 20

### 10 STABILITY AND REACTIVITY

**Stability and reactivity** : Stable under normal conditions.

**Hazardous decomposition products** : None.

**Materials to avoid** : None.

**Conditions to avoid** : Avoid leakage.

### 11 TOXICOLOGICAL INFORMATION

**Toxicity information** : No known toxicological effects from this product.

### 12 ECOLOGICAL INFORMATION

**Ecological effects information** : No known ecological damage caused by this product.

**Effect on ozone layer** : None.



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## 13 DISPOSAL CONSIDERATIONS

**General** : Do not discharge into any place where its accumulation could be dangerous.  
To atmosphere in a well ventilated place.  
Gas cylinders are refillable containers, contact supplier for the recycling.  
Contact supplier if guidance is required.

## 14 TRANSPORT INFORMATION

**UN No.** : 1066  
**H.I. nr** : 20  
**ADR/RID**  
**- Proper shipping name** : NITROGEN, COMPRESSED.  
**- ADR Class** : 2  
**- ADR/RID Classification code** : 1A  
**- Labelling ADR** : Label 2.2 : Non flammable, non toxic gas.  
**Other transport information** : Avoid transport on vehicles where the load 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 in the event of an accident or an emergency.  
Before transporting product containers :  
- Ensure that containers are firmly secured.  
- Ensure cylinder valve is closed and not leaking.  
- Ensure valve outlet cap nut or plug (where provided) is correctly fitted.  
- Ensure valve protection device (where provided) is correctly fitted.  
- Ensure there is adequate ventilation.  
- Compliance with applicable regulations.

## 15 REGULATORY INFORMATION

**EC Classification** : Not included in Annex I .  
Proposed by the industry.  
**EC Labelling**  
**- Symbol(s)** : Labelling ADR  
**- R Phrase(s)** : None.  
**- S Phrase(s)** : None.

## 16 OTHER INFORMATION

Ensure all national/local regulations are observed.  
Ensure operators understand the flammability hazard.  
The hazard of asphyxiation is often overlooked and must be stressed during operator training.

**Sources of key data used** : Eiga database

This Safety Data Sheet has been established in accordance with the applicable European Directives and applies to all countries that have translated the Directives in their national laws.

Details given in this document are believed to be correct at the time of going to press.

Before using this product in any new process or experiment, a thorough material compatibility and safety study should be carried out. Whilst proper care has been taken in the preparation of this document, no liability for injury or damage resulting from its use can be accepted.

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