

# Safety Data Sheet

## 9.5 - 60% Nitric Oxide in Nitrogen

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878  
Reference number: SDS 00250  
Issue date: 1/21/2015 Revision date: 4/21/2023 Supersedes version of: 1/9/2021 Version: 4.0

### Danger



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

### 1.1. Product identifier

SDS no : SDS 00250

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

Relevant identified uses : Industrial and professional uses. Perform risk assessment prior to use.  
Uses advised against : Consumer use.  
Uses other than those listed above are not supported, contact your supplier for more information on other uses.

### 1.3. Details of the supplier of the safety data sheet

Air Liquide UK Ltd.  
Station Road Coleshill  
B46 1JY Birmingham  
United Kingdom  
[safety.aluk@airliquide.com](mailto:safety.aluk@airliquide.com)

### 1.4. Emergency telephone number

Emergency telephone number : 01675 462695 (Available 24/7)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Physical hazards	Gases under pressure : Compressed gas	H280
Health hazards	Acute toxicity (inhalation:gas) Category 1	H330
	Skin corrosion/irritation, Category 1, Sub-Category 1B	H314
	Serious eye damage/eye irritation, Category 1	H318

### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



Signal word (CLP) : Danger  
Hazard statements (CLP) : H314 - Causes severe skin burns and eye damage.  
H280 - Contains gas under pressure; may explode if heated.  
H330 - Fatal if inhaled.  
EUH071 - Corrosive to the respiratory tract.

Precautionary statements (CLP)

- Prevention : P280 - Wear protective gloves, protective clothing, eye protection, face protection.  
P260 - Do not breathe gas, vapours.

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- Response : P303+P361+P353+P315 - IF ON SKIN : (or hair) Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Get immediate medical advice / attention.  
P304+P340+P315 - IF INHALED : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get immediate medical advice / attention.  
P305+P351+P338+P315 - IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice / attention.
- Storage : P403 - Store in a well-ventilated place.

### 2.3. Other hazards

None.  
Not classified as PBT or vPvB.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Nitric oxide	CAS-No.: 10102-43-9 EC-No.: 233-271-0 EC Index-No.: --- REACH-no: 01-2120766630-54	9.5 – 60	Ox. Gas 1, H270 Press. Gas (Comp.), H280 Skin Corr. 1B, H314 Eye Dam. 1, H318 Acute Tox. 1 (Inhalation:gas), H330
Nitrogen	CAS-No.: 7727-37-9 EC-No.: 231-783-9 EC Index-No.: --- REACH-no: *1	40	Press. Gas (Comp.), H280

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

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

\*1: Listed in Annex IV / V REACH, exempted from registration.

\*3: Registration not required: Substance manufactured or imported < 1t/y.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- Inhalation : Remove victim to uncontaminated area wearing self contained breathing apparatus. Keep victim warm and rested. Call a doctor. Perform cardiopulmonary resuscitation if breathing stopped.
- Skin contact : Remove contaminated clothing. Drench affected area with water for at least 15 minutes.
- Eye contact : Immediately flush eyes thoroughly with water for at least 15 minutes.
- Ingestion : Ingestion is not considered a potential route of exposure.

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

May cause severe chemical burns to skin and cornea. Suitable first-aid treatment should be immediately available. Seek medical advice before using product.  
Material is destructive to tissue of the mucuous membranes and upper respiratory tract.  
Cough, shortness of breath, headache, nausea.  
See section 11.

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

Obtain medical assistance.  
Treat with corticosteroid spray as soon as possible after inhalation.

## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**

- Suitable extinguishing media : Water spray or fog.  
Product does not burn, use fire control measures appropriate for the surrounding fire.
- Unsuitable extinguishing media : Do not use water jet to extinguish.

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

- Specific hazards : Exposure to fire may cause containers to rupture/explode.
- Hazardous combustion products : None that are more hazardous than the product itself.

### **5.3. Advice for firefighters**

- Specific methods : Use fire control measures appropriate for the surrounding fire. Exposure to fire and heat radiation may cause gas receptacles to rupture. Cool endangered receptacles with water spray jet from a protected position. Prevent water used in emergency cases from entering sewers and drainage systems.  
If possible, stop flow of product.  
Use water spray or fog to knock down fire fumes if possible.  
Move containers away from the fire area if this can be done without risk.
- Special protective equipment for fire fighters : Wear gas tight chemically protective clothing in combination with self contained breathing apparatus.  
Standard EN 943-2: Protective clothing against liquid and gaseous chemicals, aerosols and solid particles. Gas-tight chemical protective suits for emergency teams.  
Standard EN 137 - Self-contained open-circuit compressed air breathing apparatus with full face mask.

## **SECTION 6: Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

- For non-emergency personnel : Act in accordance with local emergency plan.  
Try to stop release.  
Evacuate area.  
Ensure adequate air ventilation.  
Stay upwind.  
See section 8 of the SDS for more information on personal protective equipment.
- For emergency responders : Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe.  
Use chemically protective clothing.  
Monitor concentration of released product.  
See section 5.3 of the SDS for more information.

### **6.2. Environmental precautions**

Reduce vapour with fog or fine water spray.  
Try to stop release.

### **6.3. Methods and material for containment and cleaning up**

Hose down area with water.  
Wash contaminated equipment or sites of leaks with copious quantities of water.

### **6.4. Reference to other sections**

See also sections 8 and 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Safe use of the product

- : Do not breathe gas.
- Avoid release of product into atmosphere.
- The product must be handled in accordance with good industrial hygiene and safety procedures.
- Only experienced and properly instructed persons should handle gases under pressure.
- Consider pressure relief device(s) in gas installations.
- Ensure the complete gas system was (or is regularly) checked for leaks before use.
- Do not smoke while handling product.
- Avoid exposure, obtain special instructions before use.
- Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt.
- Installation of a cross purge assembly between the container and the regulator is recommended.
- Purge system with dry inert gas (e.g. helium or nitrogen) before gas is introduced and when system is placed out of service.
- Avoid suck back of water, acid and alkalis.

Safe handling of the gas receptacle

- : Refer to supplier's container handling instructions.
- Do not allow backfeed into the container.
- Protect containers from physical damage; do not drag, roll, slide or drop.
- When moving cylinders, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport cylinders.
- Leave valve protection caps in place until the container has been secured against either a wall or bench or placed in a container stand and is ready for use.
- If user experiences any difficulty operating valve discontinue use and contact supplier.
- Never attempt to repair or modify container valves or safety relief devices.
- Damaged valves should be reported immediately to the supplier.
- Keep container valve outlets clean and free from contaminants particularly oil and water.
- Replace valve outlet caps or plugs and container caps where supplied as soon as container is disconnected from equipment.
- Close container valve after each use and when empty, even if still connected to equipment.
- Never attempt to transfer gases from one cylinder/container to another.
- Never use direct flame or electrical heating devices to raise the pressure of a container.
- Do not remove or deface labels provided by the supplier for the identification of the content of the container.
- Suck back of water into the container must be prevented.
- Open valve slowly to avoid pressure shock.

#### 7.2. Conditions for safe storage, including any incompatibilities

- Observe all regulations and local requirements regarding storage of containers.
- Containers should not be stored in conditions likely to encourage corrosion.
- Container valve guards or caps should be in place.
- Containers should be stored in the vertical position and properly secured to prevent them from falling over.
- Stored containers should be periodically checked for general condition and leakage.
- Keep container below 50°C in a well ventilated place.
- Store containers in location free from fire risk and away from sources of heat and ignition.
- Keep away from combustible materials.

#### 7.3. Specific end use(s)

None.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Nitric oxide (10102-43-9)	
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	30 mg/m <sup>3</sup> Limit applicable to underground mining & tunnelling industries ONLY until 21/8/23
WEL TWA (OEL TWA) [2]	25 ppm Limit applicable to underground mining & tunnelling industries ONLY until 21/8/23

DNEL (Derived-No Effect Level) : None established.

PNEC (Predicted No-Effect Concentration) : None established.

#### 8.2. Exposure controls

##### 8.2.1. Appropriate engineering controls

Product to be handled in a closed system and under strictly controlled conditions.  
Provide adequate general and local exhaust ventilation.  
Preferably use permanent leak-tight installations (e.g. welded pipes).  
Systems under pressure should be regularly checked for leakages.  
Ensure exposure is below occupational exposure limits (where available).  
Gas detectors should be used when toxic gases may be released.  
Consider the use of a work permit system e.g. for maintenance activities.

##### 8.2.2. Individual protection measures, e.g. personal protective equipment

- A risk assessment should be conducted and documented in each work area to assess the risks related to the use of the product and to select the PPE that matches the relevant risk.  
The following recommendations should be considered:  
PPE compliant to the recommended EN/ISO standards should be selected.
- Eye/face protection : Wear goggles and a face shield when transfilling or breaking transfer connections.  
Standard EN 166 - Personal eye-protection - specifications.  
Provide readily accessible eye wash stations and safety showers.
  - Skin protection
    - Hand protection : Wear chemically resistant protective gloves.  
Wear working gloves when handling gas containers.  
Standard EN 388 - Protective gloves against mechanical risk, performance level 1 or higher.  
Standard EN 374 - Protective gloves against chemicals.  
Consult glove manufacturer's product information on material suitability and material thickness.  
The breakthrough time of the selected gloves must be greater than the intended use period.
    - Other : Keep suitable chemically resistant protective clothing readily available for emergency use.  
Standard EN943-1 - Full protective suits against liquid, solid and gaseous chemicals.  
Wear safety shoes while handling containers.  
Standard EN ISO 20345 - Personal protective equipment - Safety footwear.

- Respiratory protection
  - : Gas filters may be used if all surrounding conditions e.g. type and concentration of the contaminant(s) and duration of use are known.
  - Use gas filters with full face mask, where exposure limits may be exceeded for a short-term period, e.g. connecting or disconnecting containers.
  - Standard EN 137 - Self-contained open-circuit compressed air breathing apparatus with full face mask.
  - Consult respiratory device supplier's product information for the selection of the appropriate device.
  - Gas filters do not protect against oxygen deficiency.
  - Never use any kind of filtering respiratory protection equipment when working with this substance due to it having poor or no warning properties.
  - Standard EN 14387 - Gas filter(s), combined filter(s) and standard EN136, full face masks .
  - Keep self contained breathing apparatus readily available for emergency use.
  - Self contained breathing apparatus is recommended, where unknown exposure may be expected, e.g. during maintenance activities on installation systems.
- Thermal hazards
  - : None in addition to the above sections.

### 8.2.3. Environmental exposure controls

Refer to local regulations for restriction of emissions to the atmosphere. See section 13 for specific methods for waste gas treatment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Appearance	
- Physical state at 20°C / 101.3kPa	: Gas.
- Colour	: Mixture contains one or more component(s) which have the following colour(s): Brownish gas Colourless.
Odour	: Odour threshold is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odour: Pungent.
Melting point / Freezing point	: Not applicable for gas mixtures.
Boiling point	: Not applicable for gas mixtures. It is technically not possible to determine the boiling point or range of this mixture. Component with lowest boiling point: Nitrogen -196 °C
Flammability	: Non flammable.
Lower explosion limit	: Not available.
Upper explosion limit	: Not available.
Flash point	: Not applicable for gases and gas mixtures.
Auto-ignition temperature	: Non flammable.
Decomposition temperature	: Not applicable.
pH	: Not applicable for gases and gas mixtures.
Viscosity, kinematic	: Not known.
Water solubility [20°C]	: Mixture is partially soluble in water
Partition coefficient n-octanol/water (Log Kow)	: Not available.
Vapour pressure [20°C]	: Not applicable.
Vapour pressure [50°C]	: Not applicable.
Density and/or relative density	: Not applicable.
Relative vapour density (air=1)	: Lighter or similar to air.
Particle characteristics	: Not applicable.

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

Explosive properties	: Not applicable.
Explosion limits	: Non flammable.
Oxidising properties	: Not applicable.

### 9.2.2. Other safety characteristics

Molar mass : Not applicable for gas mixtures.  
Evaporation rate : Not applicable for gases and gas mixtures.  
Other data : None.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No reactivity hazard other than the effects described in sub-sections below.  
Data for mixture are not available.  
This mixture contains components with the following reactivity : Violently oxidises organic material.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

None.

### 10.4. Conditions to avoid

Avoid moisture in installation systems.

### 10.5. Incompatible materials

For additional information on compatibility refer to ISO 11114.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity : Fatal if inhaled.

#### Nitric oxide (10102-43-9)

LC50 Inhalation - Rat [ppm]	57.5 ppm/4h
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**Skin corrosion/irritation** : Causes severe skin burns and eye damage.  
**Serious eye damage/irritation** : Causes serious eye damage.  
**Respiratory or skin sensitisation** : No known effects from this product.  
**Germ cell mutagenicity** : No known effects from this product.  
**Carcinogenicity** : No known effects from this product.  
**Toxic for reproduction : Fertility** : No known effects from this product.  
**Toxic for reproduction : unborn child** : No known effects from this product.  
**STOT-single exposure** : Severe corrosion to the respiratory tract at high concentrations.  
**STOT-repeated exposure** : No known effects from this product.  
**Aspiration hazard** : Not applicable for gases and gas mixtures.

### 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Assessment : No ecological damage caused by this product.  
EC50 48h - Daphnia magna [mg/l] : No data available.  
EC50 72h - Algae [mg/l] : No data available.  
LC50 96 h - Fish [mg/l] : No data available.

Nitric oxide (10102-43-9)	
EC50 48h - Daphnia magna [mg/l]	No data available.
EC50 72h - Algae [mg/l]	No data available.
LC50 96 h - Fish [mg/l]	No data available.

Nitrogen (7727-37-9)	
EC50 48h - Daphnia magna [mg/l]	No data available.
EC50 72h - Algae [mg/l]	No data available.
LC50 96 h - Fish [mg/l]	No data available.

### 12.2. Persistence and degradability

Assessment : No ecological damage caused by this product.

### 12.3. Bioaccumulative potential

Assessment : No data available.

### 12.4. Mobility in soil

Assessment : No ecological damage caused by this product.

### 12.5. Results of PBT and vPvB assessment

Assessment : Not classified as PBT or vPvB.

### 12.6. Endocrine disrupting properties

Assessment :

### 12.7. Other adverse effects

Other adverse effects : May cause pH changes in aqueous ecological systems.  
Effect on the ozone layer : No effect on the ozone layer.  
Effect on global warming : No known effects from this product.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Contact supplier if guidance is required.  
Must not be discharged to atmosphere.  
Ensure that the emission levels from local regulations or operating permits are not exceeded.  
Refer to the EIGA code of practice Doc.30 "Disposal of Gases", downloadable at <http://www.eiga.org> for more guidance on suitable disposal methods.  
Return unused product in original container to supplier.  
List of hazardous waste codes (from Commission Decision 2000/532/EC as amended) : 16 05 04 \*: Gases in pressure containers (including halons) containing hazardous substances.

### 13.2. Additional information

External treatment and disposal of waste should comply with applicable local and/or national regulations.



### SECTION 14: Transport information

#### 14.1. UN number or ID number

In accordance with ADR / RID / IMDG / IATA / ADN

UN-No. : 3304

#### 14.2. UN proper shipping name

Transport by road/rail (ADR/RID)

: COMPRESSED GAS, TOXIC, CORROSIVE, N.O.S. (Nitric oxide, Nitrogen)

Transport by air (ICAO-TI / IATA-DGR)

: Compressed gas, toxic, corrosive, n.o.s. (Nitric oxide, Nitrogen)

Transport by sea (IMDG)

: COMPRESSED GAS, TOXIC, CORROSIVE, N.O.S. (Nitric oxide, Nitrogen)

#### 14.3. Transport hazard class(es)

#### Labelling



2.3 : Toxic gases.

8 : Corrosive substances.

#### Transport by road/rail (ADR/RID)

Class : 2  
Classification code : 1TC  
Hazard identification number : 268  
Tunnel Restriction : C/D - Tank carriage : Passage forbidden through tunnels of category C, D and E. Other carriage : Passage forbidden through tunnels of category D and E

#### Transport by sea (IMDG)

Class / Div. (Sub. risk(s)) : 2.3 (8)  
Emergency Schedule (EmS) - Fire : F-C  
Emergency Schedule (EmS) - Spillage : S-U

#### 14.4. Packing group

Transport by road/rail (ADR/RID) : Not applicable.  
Transport by air (ICAO-TI / IATA-DGR) : Not applicable.  
Transport by sea (IMDG) : Not applicable.

#### 14.5. Environmental hazards

Transport by road/rail (ADR/RID) : None.  
Transport by air (ICAO-TI / IATA-DGR) : None.  
Transport by sea (IMDG) : None.

#### 14.6. Special precautions for user

##### Packing Instruction(s)

Transport by road/rail (ADR/RID) : P200.  
Transport by air (ICAO-TI / IATA-DGR)  
Passenger and Cargo Aircraft : Forbidden.  
Cargo Aircraft only : Forbidden.  
Transport by sea (IMDG) : P200.

##### Special transport precautions

: 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 there is adequate ventilation.  
- Ensure that containers are firmly secured.  
- Ensure 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.

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable.

## SECTION 15: Regulatory information

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

#### EU-Regulations

Restrictions on use : None.  
Contains no substance on the REACH candidate list.

Other information, restriction and prohibition regulations : Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Seveso Directive : 2012/18/EU (Seveso III) : Covered.

#### National regulations

Regulatory reference : Ensure all national/local regulations are observed.

### 15.2. Chemical safety assessment

A CSA does not need to be carried out for this product.

## SECTION 16: Other information

Indication of changes : Safety data sheet in accordance with commission regulation (EU) No 2020/878.

Section	Changed item	Change	Comments
	Revision date	Added	
	Supersedes version of	Modified	
	Number of blue cones/lights (ADN)	Added	
	Ventilation (ADN)	Added	
	Equipment required (ADN)	Added	
	Excepted quantities (ADN)	Added	
	Limited quantities (ADN)	Added	
	Danger labels (ADN)	Added	
	Classification code (ADN)	Added	
	Proper Shipping Name (RID)	Added	
	Hazard identification number (RID)	Added	
	Special provisions for carriage - Loading, unloading and handling (RID)	Added	
	Transport category (RID)	Added	
	Special provisions for RID tanks (RID)	Added	
	Tank codes for RID tanks (RID)	Added	
	Portable tank and bulk container instructions (RID)	Added	
	Mixed packing provisions (RID)	Added	
	Packing instructions (RID)	Added	
	Excepted quantities (RID)	Added	
	Limited quantities (RID)	Added	

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	Special provisions (RID)	Added	
	Classification code (RID)	Added	
	Proper Shipping Name (IMDG)	Added	
	Danger labels (IMDG)	Added	
	EmS-No. (Spillage)	Added	
	EmS-No. (Fire)	Added	
	Limited quantities (IMDG)	Added	
	Stowage and handling (IMDG)	Added	
	Stowage category (IMDG)	Added	
	Excepted quantities (IMDG)	Added	
	Special provisions (IMDG)	Added	
	Special provisions for carriage - Operation (ADR)	Added	
	Special provisions for carriage - Loading, unloading and handling (ADR)	Added	
	Tank special provisions (ADR)	Added	
	Tank code (ADR)	Added	
	Portable tank and bulk container instructions (ADR)	Added	
	Mixed packing provisions (ADR)	Added	
	Specific methods	Added	
	Conditions for safe storage, including any incompatibilities	Added	
	Restrictions on use	Added	
	Toxic for reproduction : unborn child	Added	
	Toxic for reproduction : Fertility	Added	
	Relevant identified uses	Added	
	Individual protection measures, e.g. personal protective equipment	Added	
	Results of PBT and vPvB assessment	Added	
	Effect on the ozone layer	Added	
	Uses advised against	Added	
	DISCLAIMER OF LIABILITY	Added	
	Safe handling of the gas receptacle	Added	
	STOT-repeated exposure - comment	Added	
	Respiratory or skin sensitisation - comment	Added	
	Germ cell mutagenicity - comment	Added	
	Carcinogenicity - comment	Added	
	Aspiration hazard - comment	Added	
	Indication of changes	Added	
	specific hazards	Added	

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	Flammability	Added	
	Packing instructions (ADR)	Added	
	Special provisions (IATA)	Added	
	Proper Shipping Name (IATA)	Added	
	PCA packing instructions (IATA)	Added	
	PCA max net quantity (IATA)	Added	
	PCA limited quantity max net quantity (IATA)	Added	
	PCA Limited quantities (IATA)	Added	
	ERG code (IATA)	Added	
	CAO packing instructions (IATA)	Added	
	CAO max net quantity (IATA)	Added	
	Vehicle for tank carriage	Added	
	Danger labels (IATA)	Added	
	UN-No. (RID)	Added	
	STOT-single exposure - comment	Added	
	Serious eye damage/irritation - comment	Added	
	Seveso Directive : 2012/18/EU (Seveso III)	Added	
	Acute toxicity - comment	Added	
	Most important symptoms and effects, both acute and delayed	Added	
	Special protective equipment for fire fighters	Added	
	Safe use of the product	Added	
	Methods and material for containment and cleaning up	Added	
	List of hazardous waste codes (from Commission Decision 2000/532/EC as amended)	Added	
	Skin corrosion/irritation - comment	Added	
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Added	
2.2	EUH-statements	Added	
2.2	Precautionary statements (CLP)	Added	
2.2	Signal word (CLP)	Added	
2.2	Hazard pictograms (CLP)	Added	
2.2	Hazard statements (CLP)	Added	
2.3	Other hazards which do not result in classification	Added	
4.1	First-aid measures after ingestion	Added	
4.1	First-aid measures after inhalation	Added	
4.1	First-aid measures after skin contact	Added	
4.1	First-aid measures after eye contact	Added	

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4.3	Other medical advice or treatment	Added	
5.1	Unsuitable extinguishing media	Added	
5.1	Suitable extinguishing media	Added	
5.2	Reactivity in case of fire	Added	
5.3	EAC code	Added	
6.1	Emergency procedures	Added	
6.1	Emergency procedures	Added	
6.2	Environmental precautions	Added	
6.4	Reference to other sections (8, 13)	Added	
7.3	Specific end uses	Added	
8.1	DNEL/DMEL (additional information)	Added	
8.1	PNEC (additional information)	Added	
8.2	Thermal hazard protection	Added	
8.2	Environmental exposure controls	Added	
8.2	Personal protective equipment	Added	
8.2	Other information	Added	
8.2	Respiratory protection	Added	
8.2	Hand protection	Added	
8.2	Eye protection	Added	
8.2	Appropriate engineering controls	Added	
9.1	Oxidising properties	Added	
9.1	Explosive properties	Added	
9.1	Viscosity, kinematic	Added	
9.1	Viscosity, dynamic	Added	
9.1	Relative vapour density at 20 °C	Added	
9.1	Relative evaporation rate (ether=1)	Added	
9.1	pH	Added	
9.1	Odour threshold [ppm]	Added	
9.1	Molecular mass	Added	
9.1	Melting point	Added	
9.1	Partition coefficient n-octanol/water (Log Pow)	Added	
9.1	Flash point	Added	
9.1	Explosive limits (vol %)	Added	
9.1	Decomposition temperature	Added	
9.1	Boiling point	Added	
9.1	Auto-ignition temperature	Added	
9.1	Relative gas density	Added	
9.1	Vapour pressure at 50 °C	Added	
9.1	Vapour pressure	Added	

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9.2	Additional information	Added	
10.1	Reactivity	Added	
10.2	Chemical stability	Added	
10.3	Possibility of hazardous reactions	Added	
10.4	Conditions to avoid	Added	
10.5	Incompatible materials	Added	
10.6	Hazardous decomposition products	Added	
11.1	ATE CLP (gases)	Added	
12.1	Ecology - general	Added	
12.2	Persistence and degradability	Added	
12.3	Bioaccumulative potential	Added	
12.3	Partition coefficient n-octanol/water (Log Pow)	Added	
12.4	Ecology - soil	Added	
12.7	Other adverse effects	Added	
13.1	Additional information	Added	
13.1	Waste treatment methods	Added	
14.1	UN-No. (ADN)	Added	
14.1	UN-No. (ADR)	Added	
14.1	UN-No. (IMDG)	Added	
14.1	UN-No. (IATA)	Added	
14.2	Proper Shipping Name (ADN)	Added	
14.2	Proper Shipping Name (ADR)	Added	
14.3	Danger labels (ADR)	Added	
14.3	Class (ADR)	Added	
14.3	Danger labels (RID)	Added	
14.6	Special provisions (ADN)	Added	
14.6	Packing instructions (IMDG)	Added	
14.6	Special transport precautions	Added	
14.6	Classification code (ADR)	Added	
14.6	Hazard identification number (Kemler No.)	Added	
14.6	Transport category (ADR)	Added	
14.6	Special provisions (ADR)	Added	
14.6	Limited quantities (ADR)	Added	
14.6	APP code	Added	
14.6	Excepted quantities (ADR)	Added	
14.6	Tunnel restriction code (ADR)	Added	
14.7	IBC code	Added	
15.1	Regulatory reference	Added	
15.2	Chemical safety assessment	Added	

# Safety Data Sheet

## 9.5 - 60% Nitric Oxide in Nitrogen

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878  
Reference number: SDS 00250

16	Abbreviations and acronyms	Added	
16	Other information	Added	
16	Training advice	Added	

### Abbreviations and acronyms

: ATE - Acute Toxicity Estimate.  
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008.  
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.  
EINECS - European Inventory of Existing Commercial Chemical Substances.  
CAS# - Chemical Abstract Service number.  
PPE - Personal Protection Equipment.  
LC50 - Lethal Concentration to 50 % of a test population.  
RMM - Risk Management Measures.  
PBT - Persistent, Bioaccumulative and Toxic.  
vPvB - Very Persistent and Very Bioaccumulative.  
STOT- SE : Specific Target Organ Toxicity - Single Exposure.  
CSA - Chemical Safety Assessment.  
EN - European Standard.  
UN - United Nations.  
ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road.  
IATA - International Air Transport Association.  
IMDG code - International Maritime Dangerous Goods.  
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail.  
WGK - Water Hazard Class.  
STOT - RE : Specific Target Organ Toxicity - Repeated Exposure.  
UFI : Unique Formula Identifier.

### Training advice

: Users of breathing apparatus must be trained.  
Ensure operators understand the toxicity hazard.

### Further information

: Classification using data from databases maintained by the European Industrial Gases Association (EIGA). Data is maintained in EIGA doc 169 : 'Classification and Labelling Guide', downloadable at : <http://www.eiga.eu>.  
Classification in accordance with the procedures and calculation methods of Regulation (EC) 1272/2008 (CLP).

Full text of H- and EUH-statements	
Acute Tox. 1 (Inhalation:gas)	Acute toxicity (inhalation:gas) Category 1
EUH071	Corrosive to the respiratory tract.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
H270	May cause or intensify fire; oxidiser.
H280	Contains gas under pressure; may explode if heated.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
Ox. Gas 1	Oxidising Gases, Category 1
Press. Gas (Comp.)	Gases under pressure : Compressed gas
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B

# Safety Data Sheet

## 9.5 - 60% Nitric Oxide in Nitrogen

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878  
Reference number: SDS 00250

### DISCLAIMER OF LIABILITY

: Before using this product in any new process or experiment, a thorough material compatibility and safety study should be carried out.  
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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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