

Liquid Nitrous oxide

Reference number: SDS07S

Revision date: 01/01/2023 Replace the version of: 05/09/2018 Version: 08

Danger

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

1.1. Product identifier

Trade name : Liquid Nitrous oxide

SDS n°: : SDS07S

Other means of identification : Nitrous oxide E942

CAS-n° : 10024-97-2 Number CE : 233-032-0

Index number EU : ---

REACH registration n° : 01-2119970538-25-0010

Chemical formula : N2O

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

Relevant identified uses

sheet.

: See the list of identified uses and exposures scenarios in the annex of the safety data

Perform risk assessment prior to use

Food use

Perform risk assesment prior to use

Uses advised against

- : Do not inhale product on purpose because of the risk of asphyxiation.
- : Do not inhale product on purpose because of the risk of narcotic effects.
- : 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

Eurogas S.r.l. Via Pradazzo, 22 26012 Castelleone (CR), Italy +39 0374 57191 www.eurogasitalia.it info@eurogasitalia.it



Safety Data Sheet Liquid Nitrous oxide

Reference number: SDS07S

Revision date: 01/01/2023 Replace the version of: 05/09/2018 Version: 08

1.4. Emergency telephone number

Country	Organism/Society	Address	Emergency number	Comment
Italy	Centro Antiveleni Azienda ospedaliera "Papa Giovanni XXIII", tossicologia clinica, Dipartimento di farmacia clinica e farmacologia	piazza OMS, 1 24127 Bergamo	800 883300	
Italy	Centro Antiveleni Azienda ospedaliera Niguarda Ca' Granda	piazza Ospedale Maggiore, 3 20162 Milano	+39 02 66101029	
Italy	Centro Antiveleni Policlinico "Agostino Gemelli", Servizio di tossicologia clinica	largo Agostino Gemelli, 8 00168 Roma	+39 06 3054343	
Italy	Centro Antiveleni Policlinico "Umberto I", PRGM tossicologia d'urgenza, Università di Roma	viale del Policlinico, 155 00161 Roma	+39 06 49978000	
Italy	Centro Antiveleni Ospedale pediatrico Bambino Gesù, Dipartimento emergenza e accettazione DEA	piazza Sant'Onofrio, 4 00165 Roma	+39 06 68593726	
Italy	Centro Antiveleni Azienda ospedaliera "Antonio Cardarelli", III Servizio di anestesia e rianimazione	via Antonio Cardarelli, 9 80131 Napoli	+39 081 5453333	
Italy	Centro Antiveleni Azienda ospedaliera universitaria Careggi, U.O. Tossicologia medica	largo Brambilla, 3 50134 Firenze	+39 055 7947819	

SECTION 2 : Hazard identification

Physical hazards

2.1. Classification of the substance or mixture

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

Oxidising Gases, Category 1 H270

Gases under pressure: Liquefied gas H281

Specific target organ toxicity - Single exposure, Category 3, Narcosis Health hazards H336



Liquid Nitrous oxide

Reference number: SDS07S

Revision date: 01/01/2023 Replace the version of: 05/09/2018 Version: 08

2.2.Label elements

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

Hazard pictograms (CLP)





GHS03

603 GHS04

GHS07

Signal word (CLP) : Danger

Hazard statements (CLP) : H270 - May cause or intensify fire; oxidiser.

H281 - Contains refrigerated gas; may cause burns or

cryogenic injuries

H336 - May cause drowsiness or dizziness.

Precautionary statements (CLP)

- Prevention : P260 - Do not breathe gas, vapors.

P244 - Keep valves and fittings free from oil and grease.

P220 - Keep away from clothing and other combustible materials. P282 - Use thermal gloves and face shield or eye protection.

- Response : 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.

P336+P315 - Thaw frozen parts using warm water. Do not rub the affected part.

Consult a doctor immediately.

P370+P376 - In case of fire: Stop leak if safe to do so.

- Storage : P403 - Store in a well-ventilated place.

Supplemental information : Do not inhale product on purpose because of the risk of asphyxiation.

Do not inhale product on purpose because of the risk of narcotic effects.

2.3 Other hazards

Not classified as PBT or vPvB.

The substance/mixture does not have properties that interfere with the endocrine system.

2.3. SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Nitrous oxide	CAS-N°: 10024-97-2 EC-N°: 233-032-0 EC Index-N°: REACH registration N°: 01-01- 2119970538-25-0010	100	Ox. Gas 1, H270 Press. Gas (Ref. Liq.), H281 STOT SE 3, H336

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



Liquid Nitrous oxide

Reference number: SDS07S

Revision date: 01/01/2023 Replace the version of: 05/09/2018 Version: 08

3.2. Mixtures Not applicable

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 : In case of frostbite spray with water for at least 15 minutes. Apply a sterile dressing.

Obtainmedical assistance.

- 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

In low concentrations may cause narcotic effects. Symptoms may include

dizziness, headache, nausea and loss of co-ordination.

See section 11

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

Obtain medical assistance.

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 : Supports combustion.

Exposure to fire may cause containers to rupture/explode.

Hazardous combustion products : Nitric oxide/nitrogen dioxide.

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 container rupture. Cool endangered containers with water spray jet from a protected position. Prevent water used in emergency cases

from enteringsewers and drainage systems.

If possible, stop flow of product.

Use water spray or fog to knock down fire fumes if possible.

In the event of a leak, do not spray the container with water. Cool the surrounding area

with water (from a protected position) to contain the fire.

Move containers away from the fire area if this can be done without risk.

: 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

otanuaru EN 137 - Gen-containeu open-circuit compresseu an breathing apparatus with

fullface mask.

SECTION 6: Accidental release measures

Special protective equipment for fire fighters

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : Act in accordance with local emergency plan.

EUROGAS S.r.I. EN (English) 4/14



Liquid Nitrous oxide

Reference number: SDS07S

Revision date: 01/01/2023 Replace the version of: 05/09/2018 Version: 08

Try to stop release.
Evacuate area.

=vacuate area.

Eliminate ignition sources. Ensure adequate air

ventilation.

Use protective clothing.

Prevent from entering sewers, basements and work-pits, or any place

where its accumulation can be dangerous.

Stav upwind

See section 8 of the SDS for more information on personal protective equipment.

: Monitor concentration of released product.

Wear self-contained breathing apparatus when entering area unless atmosphere is

provedto be safe.

See section 5.3 of the SDS for more information.

6.2. Environmental precautions

For emergency responders

Try to stop release.

Liquid leaks can cause the structures to become brittle.

6.3. Methods and material for containment and cleaning up

Ventilate area.

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

: 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.

Do not breathe gas.

Avoid release of product into atmosphere.

Do not smoke while handling product.

Use only properly specified equipment which is suitable for this product, its supply pressureand temperature. Contact your gas supplier if in doubt.

For more guidance on safe use, refer to the EIGA Doc.176 "Safe practices for storage and handling of Nitrous oxide", downloadable at http://www.eiga.org." and consult your supplier

Temperatures above 150°C (300°F) shall be avoided by all practical means, to reduce the likelihood of an explosive decomposition of the nitrous oxide.

Clean all surfaces in direct contact with nitrous oxide as for oxygen service.

Nitrous oxide transfer pumps shall be provided with an interlock to prevent dry running.

Use self-limiting heating devices. Direct contact electric immersion heaters are not allowed.

Use only lubricants and sealings approved for the specific gas service.

Use no oil or grease.

Keep equipment free from oil and grease. For more guidance, refer to the EIGA Doc. 33 -Cleaning of Equipment for Oxygen Service downloadable at http://www.eiga.eu.



Liquid Nitrous oxide

Reference number: SDS07S

Revision date: 01/01/2023 Replace the version of: 05/09/2018 Version: 08

Avoid suck back of water, acid and alkalis.

Ensure the complete gas system was (or is regularly) checked for leaks before

use

Consider pressure relief device(s) in gas installations.

Safe handling of the gas container

: Refer to supplier's container handling instructions. Open valve slowly to avoid pressure shock.

Do not allow back-feed 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 awall 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 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

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.

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.

Segregate from flammable gases and other flammable materials in store.

Store containers in location free from fire risk and away from sources of heat and

Keep away from combustible materials.

7.3. Specific end use(s)

None.



Liquid Nitrous oxide

Reference number: SDS07S

Revision date: 01/01/2023 Replace the version of: 05/09/2018 Version: 08

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Nitrous oxide (10024-97-2)

USA- ACGIH Occupational exposure limit values

Local name Nitrous oxide

ACGIH OEL TWA [ppm] 50 ppm

Comment (ACGIH)

TLV® Basis: CNS impair; hematologic eff; embryo/fetal dam. Notations: A4

(Not classifiable as a Human Carcinogen)

Normative reference ACGIH 2022

DNEL: Derived no effect level (Workers)

Long-term - systemic effects, inhalation 183 mg/m³

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.

Provide adequate general and local exhaust ventilation.

Systems under pressure should be regularly checked for leakages.

Ensure exposure is below occupational exposure limits (where available).

Gas detectors should be used when oxidising 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 (PPE)

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.

: Wear goggles and face safety shield when transfilling or

breaking transfer connections.

Standard EN 166 - Personal eye-protection - specifications.

Skin protection

· Eye/face protection

- Hand protection : Wear working gloves when handling gas containers.

Standard EN 388 - Protective gloves against mechanical risk, performance level 1 or

higher.

Wear cold insulating gloves when transfilling or breaking transfer connections.

Standard EN 511 - Cold insulating gloves.

- Other : Consider the use of flame resistant safety clothing.

Standard EN ISO 14116 - Limited flame spread

materials.



Liquid Nitrous oxide

Reference number: SDS07S

Revision date: 01/01/2023 Replace the version of: 05/09/2018 Version: 08

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-

termperiod, e.g. connecting or disconnecting containers.

Standard EN 137 - Self-contained open-circuit compressed air breathing apparatus with

fullface mask.

Consult respiratory device supplier's product information for the selection of the

appropriatedevice.

Gas filters do not protect against oxygen deficiency.

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.

8.2.3Environmental 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 / 101.3 kPa : Gas. - Colour : Colourless.

Odour : Sweetish. Poor warning properties at high concentrations.

The olfactory threshold is subjective and inadequate to warn of overexposure.

Melting point / Freezing point : - 90.81 °C
Boiling point : - 88.5
°C

Flammability : Not flammable.

Lower explosion limit : Not applicable.

Upper explosion limit : Not applicable.

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 applicable for gases and gas mixtures.

Water solubility [20°C] : 1500 mg/l
Partition coefficient n-octanol/water (Log Kow) : 0.4
available.Vapour pressure [20°C] : 50.8

barbar(a)

Vapour pressure [50°C] : Not available.

Density and/or relative density : Not applicable for gases and gas mixtures.

Relative vapour density (air=1) : 1.5

Particle characteristics : Nanoforms are not relevant to gases and gas mixtures.



Liquid Nitrous oxide

Reference number: SDS07S

Revision date: 01/01/2023 Replace the version of: 05/09/2018 Version: 08

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Explosion limits : Not flammable.

Oxidants properties : Oxidant.

- Coefficient of oxygen equivalency (Ci) : 0.6

Critical temperature [°C] : 36.4 °C

9.2.2. Other safety characteristics

Molar mass : 44 g/mol

Evaporation rate : Not applicable for gases and gas mixtures.

Gas group : Press. Gas (Liq.).

Other data : Gas/vapor heavier than air. May accumulate in confined spaces, particularly at below

or ground level.

SECTION 10: Stability and reactivity

10.1. Reactivity

No reactivity hazard other than the effects described in sub-sections below.

10.2. Chemical stability

Stable under normal conditions.

At temperatures over 575°C and at atmospheric pressure, nitrous oxide decomposes into

nitrogen and oxygen.

In the presence of catalysts (e.g. halogen products, mercury, nickel, platinum) the rate of

decomposition increases and decomposition can occur at even lower temperatures.

Nitrous oxide dissociation is irreversible and exothermic, leading to a considerable rise in

pressure

10.3. Possibility of hazardous reactions

May react violently with reducing agents. Violently oxidizes organic materials.

10.4. Condition to avoid

Avoid moisture in installation systems.

10.5. Incompatible materials

Keep equipment free from oil and grease. For more guidance, refer to the EIGA Doc. 33 -Cleaning of Equipment for Oxygen Service downloadable at http://www.eiga.eu.

May react violently with combustible

materials.

May react violently with reducing agents.

Materials such as carbon steels, low alloy steels and plastics become brittle at low temperatures and are subject to failure. Use materials suitable for the cryogenic conditions present in systems containing refrigerated liquid gases.

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.



Liquid Nitrous oxide

Reference number: SDS07S

Revision date: 01/01/2023 Replace the version of: 05/09/2018 Version: 08

SECTION 11 : Toxicological information

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

Acute toxicity : Classification criteria are not met.

LC50 Inhalation - Rat [ppm] 500000 ppm/4h

 Skin corrosion/irritation
 : No known effects from this product.

 Serious eye damage/irritation
 : No known effects from this product.

 Respiratory or skin sensitisation
 : No known effects from this product.

 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 : May cause drowsiness or dizziness

STOT-repeated exposure : Hemotoxic effect. Neurologic effect.

At low concentrations.

Target organ(s) : Central nervous system.

Erythrocytes. Kidneys. liver.

Aspiration hazard : Not applicable for gases and gas mixtures.

11.2. Information on other hazards

Other information : Inhalation causes narcotic effects

The substance/mixture does not have properties that interfere with the endocrine system

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.

CL50 96h - Fish [mg/l] : No data available.

12.2. Persistence and degradability

Assessment : Not applicable for inorganic products.

Study scientifically unjustified.



Liquid Nitrous oxide

Reference number: SDS07S

Revision date: 01/01/2023 Replace the version of: 05/09/2018 Version: 08

12.3. Bioaccumulative potential

Assessment : Not expected to bioaccumulate due to the low log Kow (log Kow < 4).

See section 9.

12.4. Mobility in soil

Assessment : Because of its high volatility, the product is unlikely to cause ground or water pollution.

Partition into soil is unlikely.

12.5.Results of PBT and vPvB assessment

Assessment : Not classified as PBT or vPvB.

12.6. Endocrine disrupting properties

Assessment : The substance/mixture does not have properties that interfere with the endocrine system.

12.7. Other adverse effects

Other adverse effects : May cause damage to vegetation by freezing...

Effect on the ozone layer : No effect on the ozone layer.

Global warming potential [CO2=1] : 2

Effect on global warming : When discharged in large quantities may contribute to the greenhouse effect.

Contains greenhouse gas(es).

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Contact supplier if guidance is required.

Discharge to atmosphere in large quantities should be avoided.

Do not discharge into any place where its accumulation could be dangerous.

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.

SEZIONE 14: Transport information

14.1. UN number or ID number

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

UN-N° : 2201



Liquid Nitrous oxide

Reference number: SDS07S

Revision date: 01/01/2023 Replace the version of: 05/09/2018 Version: 08

14.2.UN proper shipping name

Transport by road/rail (ADR/RID) : NITROUS OXIDE, REFRIGERETED LIQUID

Transport by air (ICAO-TI / IATA-DGR) : Nitrous oxide, refrigereted liquid

Transport by sea (IMDG) : NITROUS OXIDE, REFRIGERETED LIQUID

14.3. Transport hazard class(es)

Labelling 5.1

2.2 : Non-flammable, non-toxic gases.

5.1: Oxidizing substances.

Transport by road/rail (ADR/RID)

Class : 2
Classification code : 30
Hazard identification number : 225

Tunnel Restriction : C/E - Tank carriage : Passage forbidden through tunnels of category C, D and E.

Other carriage: Passage forbidden through tunnels of category E

Transport by sea (IMDG)

 Class / Div. (Sub. risk(s))
 : 2.2 (5.1)

 Emergency Schedule (EmS) - Fire
 : F-C

 Emergency Schedule (EmS) - Spillage
 : S-W

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) : P203.

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

Passenger and Cargo Aircraft : Forbidden.
Cargo Aircraft only : Forbidden.
Transport by sea (IMDG) : P203.



Liquid Nitrous oxide

Reference number: SDS07S

Revision date: 01/01/2023 Replace the version of: 05/09/2018 Version: 08

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. Maritme 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

UE Regulations

Restrictions on use : None.

Other information, restriction and prohibition : Not present in the PIC list (EU Regulation 649/2012).

regulations

Not present in the POP list (EU Regulation 2019/1021).

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

National regulations

Regulatory reference : Ensure all national/local regulations are observed

15.2. Chemical safety assesment

A Chemical Safety Assessment (CSA) has been conducted for this product.

SECTION 16: Other information

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



Liquid Nitrous oxide

Reference number: SDS07S

Revision date: 01/01/2023 Replace the version of: 05/09/2018 Version: 08

Abbreviations and acronymis

: ADR - European Agreement concerning the International Carriage of Dangerous Goods by

ATE - Acute Toxicity Estimate.

n. CAS - Chemical Abstract Service number

CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008.

CSA - Chemical Safety Assessment.

EINECS - European Inventory of Existing Commercial Chemical Substances.

EN - European Standard.

IATA - International Air Transport Association.

IMDG code - International Maritime Dangerous Goods.

LC50 - Lethal Concentration to 50 % of a test population.

PBT - Persistent, Bioaccumulative and Toxic.

PPE - Personal Protection Equipment.

vPvB - Very Persistent and Very Bioaccumulative.

REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.

RID - Regulations concerning the International Carriage of Dangerous Goods by Rail.

RMM - Risk Management Measures.

STOT- SE: Specific Target Organ Toxicity - Single Exposure.

STOT - RE: Specific Target Organ Toxicity - Repeated Exposure.

UFI: Unique Formula Identifier.

UN - United Nations.

· None

WGK - Water Hazard Class.

Training advice

Further information

: Classification in accordance with the procedures and calculation methods of Regulation (EC) 1272/2008 (CLP).

Key literature references and sources of data are maintained in EIGA doc 169: 'Classification and Labelling Guide', downloadable at http://www.Eiga.eu.

Full text of H- and EUH-statements

H270 May cause or intensify fire; oxidizer.

H281 .

H336 May cause drowsiness or dizziness.

Ox. Gas 1 Oxidising Gases, Category 1

Press. Gas (Liq.) Gases under pressure : Liquefied gas

STOT SE 3 Specific target organ toxicity – Single exposure, Category 3, Narcosis

DISCLAIMER OF LIABILITY : Before using this product in any new process or experiment, a thorough material

compatibility and safety study should be carried out.

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