Safety Data Sheet

According to Annex II to REACH - Regulation 2020/878 and to Annex II to UK REACH

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

1.1. Product identifier

Code:	**AD00YWD**
Product name	**LYSONOX N**
UFI :	**H500-X0Y3-S00X-Y54X**

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

Intended use **Concentrated neutralizing liquid for professional use for automatic washing machines**

Uses advised against:
Do not use for uses other than those indicated.

Identified Uses	Industrial	Professional	Consumer
Professional uses	-	✔	-

1.3. Details of the supplier of the safety data sheet

Name	**ADRANOX SRL**
Full address	**Via Imre Nagy, 46**
District and Country	**46100 Mantova (MN)** **Italia** **Headquarters: Via I° Maggio, 29 – San Giorgio Bigarello (MN)** **Tel. +39 0376 405362** **Fax +39 0376 446392**
e-mail address of the competent person responsible for the Safety Data Sheet	**adranox@adranox.com**

1.4. Emergency telephone number

For urgent inquiries refer to	**National Poisons Information Centre** **Beaumont Hospital, Beaumont, Dublin 9., Ireland** **chemicalsinfo (at) beaumont.ie** **https://www.poisons.ie/**

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878.
Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Eye irritation, category 2	H319	Causes serious eye irritation.
Skin irritation, category 2	H315	Causes skin irritation.

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:

Signal words: Warning

Hazard statements:

H319	Causes serious eye irritation.
H315	Causes skin irritation.

Precautionary statements:

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P280	Wear protective gloves / eye protection / face protection.
P332+P313	If skin irritation occurs: Get medical advice / attention.
P337+P313	If eye irritation persists: Get medical advice / attention.
P264	Wash . . . thoroughly after handling.
P302+P352	IF ON SKIN: Wash with plenty of water / . . .

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

The product does not contain substances with endocrine disrupting properties in concentration ≥ 0.1%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
acido citrico monoidrato		
CAS 5949-29-1	30 ≤ x < 32,5	Eye Irrit. 2 H319
EC 201-069-1		
INDEX -		
REACH Reg. 01-2119457026-XXXX		
GLYCOLIC ACID		
CAS 79-14-1	1 ≤ x < 1,5	Acute Tox. 4 H332, Skin Corr. 1B H314, Eye Dam. 1 H318
EC 201-180-5		LC50 Inhalation mists/powders: 3,6 mg/l/4h
INDEX -		
REACH Reg. 01-2119485579-XXXX		
FORMIC ACID		
CAS 64-18-6	0 ≤ x < 0,05	Flam. Liq. 3 H226, Acute Tox. 3 H331, Acute Tox. 4 H302, Skin Corr. 1A H314, Eye Dam. 1 H318, EUH071, Classification note according to Annex VI to the CLP Regulation: B
EC 200-579-1		Skin Corr. 1A H314: ≥ 90%, Skin Corr. 1B H314: ≥ 10%, Skin Irrit. 2 H315: ≥ 2%, Eye Dam. 1 H318: ≥ 10%, Eye Irrit. 2 H319: ≥ 2%
INDEX 607-001-00-0		LD50 Oral: 730 mg/kg, LC50 Inhalation vapours: 7,4 mg/l/4h

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.
SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.
INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.
INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

Specific information on symptoms and effects caused by the product are unknown.
GLYCOLIC ACID
Symptoms: Inhalation may cause the following symptoms: Cough, Shortness of breath, Pain, Irritation.
Contact with skin may cause the following symptoms: Irritation, Rash, Necrosis, Malaise.
Contact with eyes may cause the following symptoms: Corrosion, Ulceration, Severe irritation.
Ingestion may cause the following symptoms: Gastrointestinal discomfort, Nausea, vomiting, Diarrhea.
Risks: Causes digestive tract burns, Causes severe eye damage, Harmful if inhaled, Corrosive to the respiratory tract, Causes severe burns.

4.3. Indication of any immediate medical attention and special treatment needed
Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT
The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.
UNSUITABLE EXTINGUISHING EQUIPMENT
None in particular.

acido citrico monoidrato
Unsuitable extinguishing media:
Full jet of water.

Extinguishing media to avoid:
Water jets. Use water jets only to cool the surfaces of containers exposed to fire.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
Do not breathe combustion products.

GLYCOLIC ACID
Hazardous Combustion Products: Carbon oxides

5.3. Advice for firefighters

GENERAL INFORMATION
Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS
Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site. Send away individuals who are not suitably equipped. Wear protective gloves / protective clothing / eye protection / face protection.

6.2. Environmental precautions

Do not disperse in the environment.

6.3. Methods and material for containment and cleaning up

Use inert absorbent material to soak up leaked product. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

FORMIC ACID
Ensure complete ventilation of the premises and work areas. Sealed containers must be protected from heat as this causes pressure to build up.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

acido citrico monoidrato
Store away from humidity. Avoid direct exposure to the sun.
Incompatible materials: oxidants, bases and nitrites.

FORMIC ACID
Keep away from alkalis and alkalizing substances.
Suitable container materials: Stainless steel 1.4571, stainless steel 1.4404, stainless steel 1.4541, stainless steel 1.4306 (V2A), stainless steel 1.4307, stainless steel 1.4311, high density polyethylene (HDPE), low density polyethylene (LDPE), glass
Further information on storage conditions: Danger of bursting if sealed gas tight.

7.3. Specific end use(s)

Professional uses:
Apart from the uses described in section 1.2 no other specific uses are contemplated.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

DEU	Deutschland	Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Mitteilung 56
ESP	España	Límites de exposición profesional para agentes químicos en España 2021
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	OEL EU	Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2021

acido citrico monoidrato

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,44	mg/l
Normal value in marine water	0,04	mg/l
Normal value for fresh water sediment	34,6	mg/kg
Normal value for marine water sediment	3,46	mg/kg
Normal value of STP microorganisms	1000	mg/l
Normal value for the terrestrial compartment	33,1	mg/kg

GLYCOLIC ACID

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,0312	mg/l
Normal value in marine water	0,0031	mg/l
Normal value for fresh water sediment	0,115	mg/kg
Normal value for marine water sediment	0,0115	mg/kg
Normal value for water, intermittent release	0,312	mg/l
Normal value of STP microorganisms	7	mg/l
Normal value for the food chain (secondary poisoning)	16,66	mg/kg
Normal value for the terrestrial compartment	0,007	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,75 mg/kg bw/d				
Inhalation		2,3 mg/m3	2,3 mg/m3	2,6 mg/m3	9,2 mg/m3	9,2 mg/m3	1,53 mg/m3	10,56 mg/m3
Skin				28,85 mg/kg bw/d				57,69 mg/kg

FORMIC ACID

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	9,5	5	19 (C)	10 (C)	
MAK	DEU	9,5	5	19	10	
VLA	ESP	9	5			
VLEP	FRA	9	5			
VLEP	ITA	9	5			
WEL	GBR	9,6	5			
OEL	EU	9	5			
TLV-ACGIH		9,4	5	18,8	10	

Predicted no-effect concentration - PNEC		
Normal value in fresh water	2	mg/l
Normal value in marine water	0,2	mg/l
Normal value for fresh water sediment	13,4	mg/kg
Normal value for marine water sediment	1,34	mg/kg
Normal value for water, intermittent release	1	mg/l
Normal value of STP microorganisms	7,2	mg/l
Normal value for the terrestrial compartment	1,5	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation			3 mg/m3	3 mg/m3			9,5 mg/m3	9,5 mg/m3

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.
When choosing personal protective equipment, ask your chemical substance supplier for advice.
Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION
Protect hands with category III work gloves (see standard EN 374).
The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.
The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION
Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION
Not necessary for normal use.
Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION
Not required under normal conditions of use and with adequate ventilation.
If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.
Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.
If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS
The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	liquid	
Colour	colourless	
Odour	characteristic	
Odour threshold	Not determined	
Melting point / freezing point	Not determined	
Initial boiling point	Not determined	
Boiling range	Not determined	
Flammability	Not available	
Lower explosive limit	Not determined	
Upper explosive limit	Not determined	
Flash point	Not determined	
Auto-ignition temperature	Not determined	
Decomposition temperature	Not determined	
pH	3,1	Concentration: 0,1 %
Kinematic viscosity	Not determined	
Solubility	Not available	
Partition coefficient: n-octanol/water	Not determined	
Vapour pressure	Not available	
Density and/or relative density	1,125	
Relative vapour density	Not determined	
Particle characteristics	Not applicable	

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

Information not available

Evaporation rate	Not determined

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.
FORMIC ACID
Decomposes under the effect of heat.Attacks various types of plastic materials.
At room temperature it can release carbon monoxide.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.
acido citrico monoidrato
On contact with: alkaline substances.
GLYCOLIC ACID
May react with: strong oxidising agents.
FORMIC ACID
Risk of explosion on contact with: sodium hypochlorite,nitromethane,hydrogen peroxide,furfuryl alcohol.May react dangerously with: alkaline hydroxides,alkaline earth hydroxides,aluminium,palladium-carbon,oxidising agents,phosphorus pentoxide,nitric acid,concentrated sulphuric acid,trihydrate thallium trinitrate.May react dangerously if exposed to: heat.Forms explosive mixtures with: air.

10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.
acido citrico monoidrato
Avoid exposure to: heat,moisture.

FORMIC ACID
Avoid exposure to: light,sources of heat,naked flames.

10.5. Incompatible materials

acido citrico monoidrato
Incompatible with: oxidising agents,strong bases,heavy metals.
GLYCOLIC ACID
Avoid contact with: oxidising agents,bases.
FORMIC ACID
Incompatible with: strong oxidants,strong bases,sulphuric acid,furfurylic acid.

10.6. Hazardous decomposition products

acido citrico monoidrato
Develops: carbon oxides.
FORMIC ACID
May develop: carbon monoxide,hydrogen.

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.
It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

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

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation - mists / powders) of the mixture:	> 5 mg/l
ATE (Oral) of the mixture:	Not classified (no significant component)
ATE (Dermal) of the mixture:	Not classified (no significant component)

acido citrico monoidrato

LD50 (Dermal):	> 2000 mg/kg Ratto
LD50 (Oral):	5400 mg/kg Topo

GLYCOLIC ACID

LD50 (Oral):	1950 mg/kg Rat
LC50 (Inhalation mists/powders):	3,6 mg/l/4h Rat

FORMIC ACID

LD50 (Oral):	730 mg/kg Ratto
LC50 (Inhalation vapours):	7,4 mg/l/4h Ratto

SKIN CORROSION / IRRITATION

Causes skin irritation

GLYCOLIC ACID
On rabbit
Classification: Causes burns.

Result: Corrosive after 3 minutes to 1 hour of exposure
Method: OECD Test Guideline 404

FORMIC ACID
Not tested on animals
Classification: Corrosive
Result: Causes severe burns.

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

GLYCOLIC ACID
On rabbit
Classification: Risk of serious damage to eyes.
Result: Corrosive
Method: OECD Test Guideline 405

FORMIC ACID
Not tested on animals
Classification: Causes severe burns.
Result: Corrosive

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

GLYCOLIC ACID
Guinea pig
Classification: Does not cause skin sensitization.
Result: Does not cause skin sensitization.
Method: OECD Test Guideline 406

FORMIC ACID
Guinea pig
Classification: Does not cause skin sensitization.
Result: Does not cause skin sensitization.

Respiratory sensitization

Information not available

Skin sensitization

Information not available

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

GLYCOLIC ACID
Animal testing did not show any mutagenic effects. Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

FORMIC ACID
Tests on bacterial or mammalian cell cultures did not show mutagenic effects. It did not cause genetic damage in cultured bacterial cells. Genetic damage in cultured mammalian cells has been observed in some laboratory tests but not in others. It does not cause genetic damage in insects.

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

GLYCOLIC ACID
Not classifiable as a human carcinogen. Animal testing did not reveal any carcinogenic effects.

FORMIC ACID
Not classifiable as a human carcinogen. Animal testing did not reveal any carcinogenic effects. Information given is based on data obtained from similar substances.

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

FORMIC ACID
Not toxic for reproduction Animal tests have not shown reproductive toxicity

Adverse effects on sexual function and fertility

GLYCOLIC ACID
Non toxic for reproduction Animal tests have not shown reproductive toxicity No effects on or via lactation

Adverse effects on development of the offspring

GLYCOLIC ACID
Animal tests have shown effects on embryo-fetal development at levels equal to or higher than those causing maternal toxicity.

FORMIC ACID
Animal testing showed no developmental toxicity. Information given is based on data obtained from similar substances.

Effects on or via lactation

Information not available

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

Target organs

Information not available

Route of exposure

Information not available

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

Target organs

Information not available

Route of exposure

Information not available

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

SECTION 12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity

acido citrico monoidrato	
EC50 - for Crustacea	1535 mg/l/48h Daphnia magna
GLYCOLIC ACID	
LC50 - for Fish	194 mg/l/96h
EC50 - for Crustacea	141 mg/l/48h
EC50 - for Algae / Aquatic Plants	44 mg/l/72h
FORMIC ACID	
LC50 - for Fish	> 46 mg/l/96h Leuciscus idus (Leucisco dorato)
EC50 - for Crustacea	34,2 mg/l/48h Daphnia magna (Pulce d'acqua grande)
EC50 - for Algae / Aquatic Plants	26,9 mg/l/72h
Chronic NOEC for Crustacea	100 mg/l 21d Daphnia magna (Pulce d'acqua grande)

12.2. Persistence and degradability

acido citrico monoidrato

Rapidly degradable
Biodegradabilità: 97%. OECD TG 301B

GLYCOLIC ACID

Solubility in water > 10000 mg/l

Rapidly degradable

FORMIC ACID

Solubility in water	1000 - 10000 mg/l
Rapidly degradable	

12.3. Bioaccumulative potential

acido citrico monoidrato	
BCF	-1
GLYCOLIC ACID	
Partition coefficient: n-octanol/water	< 0,3
FORMIC ACID	
Partition coefficient: n-octanol/water	-2,1

12.4. Mobility in soil

GLYCOLIC ACID	
Partition coefficient: soil/water	< 1,4
FORMIC ACID	
Partition coefficient: soil/water	< 1,25

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

12.7. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.
Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.
CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.1. UN number or ID number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EU: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

Point	3 - 40

Contained substance

Point	75

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

Not applicable

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage ≥ than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

15.2. Chemical safety assessment

A chemical safety assessment has been performed for the product

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Flam. Liq. 3	Flammable liquid, category 3
Acute Tox. 3	Acute toxicity, category 3
Acute Tox. 4	Acute toxicity, category 4
Skin Corr. 1A	Skin corrosion, category 1A
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
H226	Flammable liquid and vapour.
H331	Toxic if inhaled.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
EUH071	Corrosive to the respiratory tract.

LEGEND:
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY
1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2019/521 (XII Atp. CLP)
16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:
The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.
This document must not be regarded as a guarantee on any specific product property.
The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.
Provide appointed staff with adequate training on how to use chemical products.
CALCULATION METHODS FOR CLASSIFICATION
Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.
Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.
Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review:
The following sections were modified:
01 / 02 / 03 / 04 / 05 / 07 / 09 / 10 / 11 / 12 / 15 / 16.