

ENGLISH

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers

Product name: Listeria System 18R Reagent
 Product Number: 80257

1.2 Identified uses of the relevant substance or mixture and uses advised against

Identified uses relevant: Professional uses, Health Services, scientific research and development

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Liofilchem®
 Address: Via Scozia, 64026 - Roseto degli Abruzzi (TE)
 Telephone number: 085/8930745
 Fax number: 085/8930330
 E-mail address: liofilchem@liofilchem.com

1.4 Emergency telephone number

+39 02-66101029 (Centro Antiveleni Niguarda Cà Granda - Milano).

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Flam. Liq. 2, Flammable liquids (Category 2); H225
 Flam. Liq. 3, Flammable liquids (Category 3); H226
 Skin Corr. 1B, Skin corrosion (Category 1B); H314
 Eye Dam. 1, Serious eye damage (Category 1); H318
 STOT SE 3, Specific target organ toxicity - single exposure (Category 3); H335, H336
 Aquatic Chronic 3 Chronic toxicity to the aquatic environment (Category 3); H412

2.2 Label elements

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

Pictogram



Hazard statement(s)

H225	Highly Flammable liquid and vapour.
H226	. Flammable liquid and vapour.
H314	Causes serious eye damage.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness
H412	Harmful to aquatic life with long lasting effects

Precautionary statement(s)

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P233	Keep container tightly closed
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/light equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures to prevent static discharges
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling
P273	Avoid release to the environment
P280	wear protective gloves/protective clothing/eye protection/face protection.
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with
P303 + P361 + P353	water/shower.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and
	easy to do. Continue rinsing.
P304	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P310	Immediately call a POISON CENTER or doctor/physician.
P363	Wash contaminated clothing before reuse

Supplemental Hazard Statements - none

2.3 Other hazards - .none

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Refer to the individual component safety data sheets

SECTION 4. FIRST AID MEASURES

Refer to the individual component safety data sheets

SECTION 5. FIRE-FIGHTING MEASURES

Refer to the individual component safety data sheets

SECTION 6. ACCIDENTAL RELEASE MEASURES

Refer to the individual component safety data sheets

SECTION 7. HANDLING AND STORAGE

Refer to the individual component safety data sheets

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Refer to the individual component safety data sheets

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Refer to the individual component safety data sheets

SECTION 10. STABILITY AND REACTIVITY

Refer to the individual component safety data sheets

SECTION 11. TOXICOLOGICAL INFORMATION

Refer to the individual component safety data sheets

SECTION 12. ECOLOGICAL INFORMATION

Refer to the individual component safety data sheets

SECTION 13. DISPOSAL CONSIDERATIONS

Refer to the individual component safety data sheets

SECTION 14. TRANSPORT INFORMATION

14.1 UN number

ADR/RID: - IMDG: - IATA: -

Refer to component MSDS

14.2 UN proper shipping name

ADR/RID: Refer to component MSDS

IMDG: Refer to component MSDS

IATA: Refer to component MSDS

14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

Refer to component MSDS

14.4 Packaging group

ADR/RID: - IMDG: - IATA: -

Refer to component MSDS

14.5 Environmental hazards

ADR/RID: no IMDG: no IATA: no

Refer to component MSDS

14.6 Special precautions for user

no data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

15. REGULATORY INFORMATION

This safety datasheet complies with:

- the requirements of European Parliament and of the Council Regulation (EC) No. 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and Commission Regulation (EU) No. 453/2010 amending Commission Regulation (EC) No. 1907/2006.
- the requirements of Commission Regulation EU 2020/878

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

The product is classified, coded and labeled in accordance with EU Regulation on Hazardous Materials.

15.2 Chemical Safety Assessment

This product has not been made a chemical safety assessment.

16. OTHER INFORMATION

KIT Components

\$080430	NaOH 40% Reagent	Skin Corr. 1A, Skin corrosion (Category 1A)
\$080436	H ₂ O ₂ Reagent	Skin Corr. 1A, Skin corrosion (Category 1A)
\$080437	Vaseline oil	Not Dangerous
\$080434	Methyl Red Reagent	Flam. Liq. 2, Flammable liquids (Category 2)
\$080432	Sulphanilic Acid Reagent	Flam. Liq. 3, Flammable liquids (Category 3) Skin Corr. 1A, Skin corrosion (Category 1A)
\$080433	Alpha Naphthylamine Reagent	Flam. Liq. 3, Flammable liquids (Category 3) Skin Corr. 1A, Skin corrosion (Category 1A)
\$080435	Kovac's Reagent	Flam. Liq. 3, Flammable liquids (Category 3) Skin Corr. 1B, Skin corrosion (Category 1B) Eye Dam. 1, Serious eye damage (Category 1) STOT SE 3, Specific target organ toxicity - single exposure (Category 3)
\$080431	Alpha Naphtol Reagent	Flam. Liq. 2, Flammable liquids (Category 2) Eye Dam. 1, Serious eye damage (Category 1) Aquatic Chronic 3 Chronic toxicity to the aquatic environment (Category 3)

Text of H code(s) mentioned in Section 3

Refer to the individual component safety data sheets

Abbreviations and acronyms

Refer to the individual component safety data sheets

Training advice

The product must be used by qualified personnel. It is recommended to provide basic training with regard to safety and health at work to ensure proper handling of the product.

Further information

The information in this document is based on the present state of our knowledge. The user must ensure the accuracy and completeness of such information in relation to the specific use intended.

Liofilchem® shall not be held liable for any damage resulting from handling or from contact with the above product. See www.liofilchem.com. for additional terms and conditions of sale.

Previous date: 01.06.2015

Revision date: 17.04.2023

Revision Number: rev. 7

ENGLISH

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers

Product name: H₂O₂ Reagent

Product Number: : \$080402 – \$080430 – 87002B

1.2 Identified uses of the relevant substance or mixture and uses advised against

Identified uses relevant: Professional uses, Health Services, scientific research and development

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Liofilchem®

Address: Via Scozia, 64026 - Roseto degli Abruzzi (TE)

Telephone number: 085/8930745

Fax number: 085/8930330

E-mail address: liofilchem@lioilchem.com

1.4 Emergency telephone number

+39 02-66101029 (Centro Antiveleni Niguarda Cà Granda - Milano).

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Skin Corr. 1A, Skin corrosion (Category 1A); H314

2.2 Label elements

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

Pictogram



Signal word

Danger

Hazard statement(s)

H314 Causes severe skin burns and eye damage

Precautionary statement(s)

P260 Avoid release to the environment.

P264 Wash hands thoroughly after handling

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

P303 + P361 + P353 IF ON SKIN: Remove immediately all contaminated clothing. Rinse skin with water.

P363 Wash contaminated clothing before reuse

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P310 Immediately call a POISON CENTER or doctor

P321 Specific treatment

P305 + P351 + P338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

Supplemental Hazard Statements - none

2.3 Other hazards - This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures:

Hazardous substances

CAS n°	EC n°	Index n°	Registration number REACH	Concentration	Classification according Regulation (EC) 1272/2008	according (EC) No
Sodium Hydroxide						
1310-73-2	215-185-5	008-003-00-9	011-002-00-6	40.0 %	Skin Corr. 1A; H314	

Additional Information:

For full text of H-statements, see SECTION 16

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Consult a physician

In case of eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult a physician

If swallowed: Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician

4.2 Most important symptoms and effects, both acute and delayed

no data available

4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

No data available.

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Ensure adequate ventilation. Do not inhale.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided

6.3 Methods and material for containment and cleaning up

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For information on safe handling, see Chapter 7.

For information on personal protection equipment see Chapter 8.

For disposal information see Chapter 13.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Provide appropriate exhaust ventilation at places where dust is formed.

Do not eat, drink or smoke in work areas, wash hands after use; and remove contaminated clothing and protective equipment before entering areas where you eat.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
Recommended storage temperature, see the product label.

7.3 Specific end uses

Apart from the uses described in section 1.2 are not covered other specific uses.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

no data available

8.2 Exposure controls

Exposure controls

Handle in accordance with good hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eyes/Face Protection: It is advisable wear safety goggles

Skin protection: Handle with gloves

Body Protection: Use protective clothes in accordance with laboratory good practices.

Respiratory protection: It is advisable wear dust mask.

Environmental exposure control

For information relating to environmental precautions, see chapter 6.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Form	Liquid
Color	Coulourless

Odour

No data available

pH

No data available

Melting point/ freezing point

No data available

Initial boiling point and boiling range

No data available

Evaporation rate

No data available

Flammability (solid, gas)

No data available

Upper / lower flammability or explosive limits

No data available

Flash point

No data available

Auto-ignition temperature

No data available

Decomposition temperature

No data available

Vapour pressure

No data available

Vapour density

No data available

Relative density

No data available

Water solubility

Soluble

Partition coefficient: n-octanol/water

No data available

Viscosity

No data available

Explosive properties

No data available

Oxidizing properties

No data available

9.2 Other safety information

no data available

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

no data available

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

Exposure to direct solar light.

10.5 Incompatible materials

Zinc, Powdered metals, Iron, Copper, Nickel, Brass, Iron and iron salts.

10.6 Hazardous decomposition products

No decomposition when used for the intended uses.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity: no data available

Skin corrosion/irritation: Sodium Hydroxide effects are: Skin – rabbit - Causes severe burns-24 h

Serious eye damage/eye irritation: Sodium Hydroxide effects are: Eyes – rabbit - Corrosive-24 h

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

Carcinogenicity: IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Additional information: RTECS: no data available

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

This mixture contains no substances evaluated PBT or vPvB

12.6 Endocrine disrupting properties

The mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

none

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Not be disposed of with household waste. Do not discharge into sewers.

The product must be specially treated adhering to official regulations administrative. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

14.1 UN number

ADR/RID: UN 1824

ADR/RID: UN
1824

ADR/RID: UN 1824

14.2 UN proper shipping name

ADR/RID: SODIUM HYDROXIDE SOLUTION

IMDG: SODIUM HYDROXIDE SOLUTION

IATA: SODIUM HYDROXIDE SOLUTION

14.3 Transport hazard class(es)

ADR/RID: 8 ADR/RID: 8 ADR/RID: 8

14.4 Packaging group

ADR/RID: II ADR/RID: II ADR/RID: II

14.5 Environmental hazards

ADR/RID: no ADR/RID: no ADR/RID: no

14.6 Special precautions for user

no data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

15. REGULATORY INFORMATION

This safety datasheet complies with:

- the requirements of European Parliament and of the Council Regulation (EC) No. 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and Commission Regulation (EU) No. 453/2010 amending Commission Regulation (EC) No. 1907/2006.
- the requirements of Commission Regulation EU 2020/878

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

The product is classified, coded and labeled in accordance with EU Regulation on Hazardous Materials.

15.2 Chemical Safety Assessment

This product has not been made a chemical safety assessment.

16. OTHER INFORMATION

Text of H code(s) and R-phrases mentioned in Section 3

Skin Corr. 1A Skin corrosion (Category 1)

Aquatic Chronic 3, Chronic Long-term aquatic hazard (Category 3)

H314 Causes severe skin burns and eye damage

Abbreviations and acronyms

- 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

Training advice

The product must be used by qualified personnel. It is recommended to provide basic training with regard to safety and health at work to ensure proper handling of the product.

Further information

The information in this document is based on the present state of our knowledge. The user must ensure the accuracy and completeness of such information in relation to the specific use intended.

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Previous date: 01.06.2015

Revision date: 17.04.2023

Revision Number: rev. 6

ENGLISH

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers

Product name: H₂O₂ Reagent

Product Number:: : \$080414-\$080419-\$080436-\$87008--87003

1.2 Identified uses of the relevant substance or mixture and uses advised against

Identified uses relevant: Professional uses, Health Services, scientific research and development

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Liofilchem®

Address: Via Scozia, 64026 - Roseto degli Abruzzi (TE)

Telephone number: 085/8930745

Fax number: 085/8930330

E-mail address: liofilchem@liofilchem.com

1.4 Emergency telephone number

+39 02-66101029 (Centro Antiveleni Niguarda Cà Granda - Milano).

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Skin Corr. 1A, Skin corrosion (Category 1A); H314

2.2 Label elements

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

Pictogram



Signal word

Danger

Hazard statement(s)

H314 Causes severe skin burns and eye damage

Precautionary statement(s)

P260 Avoid release to the environment.

P264 Wash hands thoroughly after handling

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

P303 + P361 + P353 IF ON SKIN: Remove immediately all contaminated clothing. Rinse skin with water.

P363 Wash contaminated clothing before reuse

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P310 Immediately call a POISON CENTER or doctor

P321 Specific treatment

P305 + P351 + P338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

Supplemental Hazard Statements - none

2.3 Other hazards - This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures:

Hazardous substances

CAS n°	EC n°	Index n°	Registration number REACH	Concentration	Classification according Regulation (EC) No 1272/2008
Hydrogen Peroxide					
7722-84-1	231-765-0	008-003-00-9	01-2119485845-22-xxxx	7,5 %	Ox. Liq. 1; Acute Tox. 4; Skin Corr. 1A; Eye Dam. 1; STOT SE 3; Aquatic Chronic 3; H271, H302, H332, H314, H318, H335, H412

Additional Information:

For full text of H-statements, see SECTION 16

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Consult a physician

In case of eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult a physician

If swallowed: Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician

4.2 Most important symptoms and effects, both acute and delayed

no data available

4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

No data available.

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Ensure adequate ventilation. Do not inhale.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided

6.3 Methods and material for containment and cleaning up

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For information on safe handling, see Chapter 7.

For information on personal protection equipment see Chapter 8.

For disposal information see Chapter 13.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Provide appropriate exhaust ventilation at places where dust is formed.
Do not eat, drink or smoke in work areas, wash hands after use; and remove contaminated clothing and protective equipment before entering areas where you eat.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
Recommended storage temperature, see the product label.

7.3 Specific end uses

Apart from the uses described in section 1.2 are not covered other specific uses.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

no data available

8.2 Exposure controls

Exposure controls

Handle in accordance with good hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eyes/Face Protection: It is advisable wear safety goggles

Skin protection: Handle with gloves

Body Protection: Use protective clothes in accordance with laboratory good practices.

Respiratory protection: It is advisable wear dust mask.

Environmental exposure control

For information relating to environmental precautions, see chapter 6.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Form	Liquid
Color	Coulourless

Odour

No data available

pH

No data available

Melting point/ freezing point

No data available

Initial boiling point and boiling range

No data available

Evaporation rate

No data available

Flammability (solid, gas)

No data available

Upper / lower flammability or explosive limits

No data available

Flash point

No data available

Auto-ignition temperature

No data available

Decomposition temperature

No data available

Vapour pressure

No data available

Vapour density

No data available

Relative density

No data available

Water solubility

Soluble

Partition coefficient: n-octanol/water

No data available

Viscosity

No data available

Explosive properties

No data available

Oxidizing properties

No data available

9.2 Other safety information

no data available

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

no data available

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

Exposure to direct solar light.

10.5 Incompatible materials

Zinc, Powdered metals, Iron, Copper, Nickel, Brass, Iron and iron salts.

10.6 Hazardous decomposition products

No decomposition when used for the intended uses.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity: Mixture toxicity STAmix (Oral) > 3000 mg/kg

- **Hydrogen Peroxide (CAS 7722-84-1)**
DL50 Oral - Rat - female – 639,7 mg/kg
LD50 Dermal - Rabbit - male and female - > 2.000 mg/kg

Skin corrosion/irritation: Causes severe burns

Serious eye damage/eye irritation: Causes serious eye damage

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: negative

Carcinogenicity: no data available

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Additional information: RTECS: no data available

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

This mixture contains no substances evaluated PBT or vPvB

12.6 Endocrine disrupting properties

The mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

none

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Not be disposed of with household waste. Do not discharge into sewers.

The product must be specially treated adhering to official regulations administrative. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

14.1 UN number

ADR/RID: - IMDG: - IATA: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

14.4 Packaging group

ADR/RID: - IMDG: - IATA: -

14.5 Environmental hazards

ADR/RID: no IMDG: no IATA: no

14.6 Special precautions for user

no data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

15. REGULATORY INFORMATION

This safety datasheet complies with:

- the requirements of European Parliament and of the Council Regulation (EC) No. 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and Commission Regulation (EU) No. 453/2010 amending Commission Regulation (EC) No. 1907/2006.
- the requirements of Commission Regulation EU 2020/878

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

The product is classified, coded and labeled in accordance with EU Regulation on Hazardous Materials.

15.2 Chemical Safety Assessment

This product has not been made a chemical safety assessment.

16. OTHER INFORMATION

Text of H code(s) and R-phras(e)s mentioned in Section 3

Ox. Liq. 1 Oxidising liquid (Category 1)

Acute Tox. 4 Acute Toxicity (Category 4)

Skin Corr. 1A Skin corrosion (Category 1)

Eye Dam. 1 Serious eye damage (Category 1)

Aquatic Chronic 3, Chronic Long-term aquatic hazard (Category 3)

H271 May cause fire or explosion; strong oxidizer

H302 Harmful if swallowed

H332 Harmful if inhaled

H314 Causes severe skin burns and eye damage

H318 Causes serious eye damage

H335 May cause respiratory irritation

H412 Harmful to aquatic life with long lasting effects

Abbreviations and acronyms

- 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

Training advice

The product must be used by qualified personnel. It is recommended to provide basic training with regard to safety and health at work to ensure proper handling of the product.

Further information

The information in this document is based on the present state of our knowledge. The user must ensure the accuracy and completeness of such information in relation to the specific use intended.

Liofilchem® shall not be held liable for any damage resulting from handling or from contact with the above product. See www.liofilchem.com. for additional terms and conditions of sale.

Previous date: 22.09.2020

Revision date: 17.04.2023

Revision Number: rev. 3

Code Number (REF): \$080426-\$080427-\$080437-\$080278-\$080408-\$080409

Description: Vaseline oil

Date of revision: Rev. 0 of 17.04.2023

Liofilchem® certifies that the above-mentioned product is not classified hazardous and does not contains hazardous ingredients, substances with Community workplaces exposure limits or substances of very high concern above their disclosure limits according to the criteria described in Regulation (EC) No. 1272/2008. concerning the classification, labelling and packaging of substances and mixtures and its revisions. Consequently, a Material Safety Data Sheet is not provided for this product. (Regulation EC No. 1907/2006 – REACH and Regulation 2020/878).

The product must be used by qualified personnel.

Remind that the waste of the product must be carried out according to legislation in force and in conformity with local regulations

Matteo Nallira
Regulatory Affairs
(signature on file)

Liofilchem®
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Tel. +39 085 8930745 - Fax +39 085 8930330
www.liofilchem.com

ENGLISH

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers

Product name: Methyl Red Droppers
 Product Number: \$080412-\$080434-87009

1.2 Identified uses of the relevant substance or mixture and uses advised against

Identified uses relevant: Professional uses, Health Services, scientific research and development

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Liofilchem®
 Address: Via Scozia, 64026 - Roseto degli Abruzzi (TE)
 Telephone number: 085/8930745
 Fax number: 085/8930330
 E-mail address: liofilchem@liofilchem.com

1.4 Emergency telephone number

+39 02-66101029 (Centro Antiveleni Niguarda Cà Granda - Milano).

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Flam. Liq. 2, Flammable liquids (Category 2); H225

2.2 Label elements

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

Pictogram



Signal word

Danger

Hazard statement(s)

H225 Highly flammable liquid and vapour

Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
 P243 Take precautionary measures to prevent static discharges

Supplemental Hazard Statements - none

2.3 Other hazards - none

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures:

Hazardous substances

CAS n°	EC n°	Index n°	Registration number REACH	Concentration	Classification according Regulation (EC) No 1272/2008
Ethanol					
64-17-5	200-578-6	603-002-00-5	-	60.0 %	Flam. Liq. 2; H225

Additional Information:

For full text of H-statements, see SECTION 16

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

EYES: Rinse opened eye for several minutes under running water. Then consult a doctor. Seek immediate medical advice.

SKIN: Immediately wash with water and soap and rinse thoroughly. Wash contaminated clothing before reuse. If skin irritation continues, consult a doctor.

INGESTION: Call for a doctor immediately

INHALATION: Supply fresh air; consult a doctor in case of complaints.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Water

CO2 or alcohol resistant foam

5.2 Special hazards arising from the substance or mixture

Sodium compounds.

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

Keep away any ignition source.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

6.2 Environmental precautions

Do not allow to penetrate the ground/soil.

Dilute with plenty of water after collecting the liquid.

Prevent seepage into sewage system, workpits and cellars.

6.3 Methods and material for containment and cleaning up

Collect the liquid with vacuum in a suitable container and absorb the remainder with a porous material (diatomite, acid binders, universal binders, etc).

Ensure adequate ventilation.

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

Avoid contact with skin. Avoid inhalation of vapour or mist. Do not eat, drink or smoking in work areas, wash hands after use; and remove contaminated clothing and protective equipment before entering areas where you eat.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
Recommended storage temperature, see the product label.

7.3 Specific end uses

Apart from the uses described in section 1.2 are not covered other specific uses.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

- **Ethanol**
 - Dermal (DNEL workers-systemic chronic effects): 343 mg/kg
 - Inhalative (DNEL workers-local effects acute): 19 mg/m³
 - Inhalative (DNEL workers-local chronic effects): 950 mg/kg
 - PNEC (Fresh water): 0,96 mg/l
 - PNEC (Freshwater sediment): 3,6 mg/kg
 - PNEC (Marine water): 0,79 mg/l
 - PNEC (Seawater sediment): 2,9 mg/l
 - PNEC (STP): 580 mg/l
 - PNEC (Soil): 0,63 mg/kg

8.2 Exposure controls

Exposure controls

Handle in accordance with good hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eyes/Face Protection: It is advisable wear safety goggles

Skin protection: Handle with gloves

Body Protection: Use protective clothes in accordance with laboratory good practices.

Respiratory protection: It is advisable wear dust mask.

Environmental exposure control

For information relating to environmental precautions, see chapter 6.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Form	Liquid
Color	Red

Odour

characteristic

pH

No data available

Melting point/ freezing point

No data available

Initial boiling point and boiling range

> 35°C

Evaporation rate

No data available

Flammability (solid, gas)

No data available

Upper / lower flammability or explosive limits

< 23°C

Flash point

No data available

Auto-ignition temperature

No data available

Decomposition temperature

No data available

Vapour pressure

No data available

Vapour density

No data available

Relative density

No data available

Water solubility

Soluble

Partition coefficient: n-octanol/water

No data available

Viscosity

No data available

Explosive properties

No data available

Oxidizing properties

No data available

9.2 Other safety information

No data available

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

There are no particular reaction in normal conditions of use

10.4 Conditions to avoid

Heat, flames and sparks

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

No data available

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity Based on available data, the classification criteria are not met.

Skin corrosion/irritation Causes severe skin burns.

Serious eye damage/irritation No data available

Ingestion: It can be harmful if swallowed.

Inhalation: No data available

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT-single exposure Based on available data, the classification criteria are not met.

STOT-repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are not met.

Other information (about experimental toxicology): No further relevant information available.

11.2 Information on other hazards

No data available

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

- **Ethanol**

EC50/48h: 5,012 mg/l (Daphnia)

EC50: 72 mg/L (algae)

LC50/96h: 11,200 mg/l (fishes)

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This mixture contains no substances evaluated PBT or vPvB

12.6 Endocrine disrupting properties

The mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

None

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Not be disposed of with household waste. Do not discharge into sewers.

The product must be specially treated adhering to official regulations administrative. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. TRANSPORT INFORMATION

14.1 UN number

ADR/RID: UN 1170 IMDG: UN 1170 IATA: UN 1170

14.2 UN proper shipping name

ADR/RID: ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

IMDG: ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

IATA: ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

14.3 Transport hazard class(es)

ADR/RID: 3 IMDG: 3 IATA: 3

14.4 Packaging group

ADR/RID: II IMDG: II IATA: II

14.5 Environmental hazards

ADR/RID: no IMDG: no IATA: no

14.6 Special precautions for user

no data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

15. REGULATORY INFORMATION

This safety datasheet complies with:

- the requirements of European Parliament and of the Council Regulation (EC) No. 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and Commission Regulation (EU) No. 453/2010 amending Commission Regulation (EC) No. 1907/2006.
- the requirements of Commission Regulation EU 2020/878

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

The product is classified, coded and labeled in accordance with EU Regulation on Hazardous Materials.

15.2 Chemical Safety Assessment

This product has not been made a chemical safety assessment.

16. OTHER INFORMATION

Text of H code(s) mentioned in Section 3

Flam. Liq. 2, Flammable liquids (Category 2);

H225, Highly flammable liquid and vapour

Abbreviations and acronyms

- 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

Training advice

The product must be used by qualified personnel. It is recommended to provide basic training with regard to safety and health at work to ensure proper handling of the product.

Further information

The information in this document is based on the present state of our knowledge. The user must ensure the accuracy and completeness of such information in relation to the specific use intended.

Liofilchem® shall not be held liable for any damage resulting from handling or from contact with the above product. See www.liofilchem.com. for additional terms and conditions of sale.

Previous date: 17.01.2017

Revision date: 17.04.2023

Revision Number: rev. 1

ENGLISH

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers

Product name: Sulphanilic Acid Reagent
 Product Number: \$080406-\$080418-\$080432

1.2 Identified uses of the relevant substance or mixture and uses advised against

Identified uses relevant: Professional uses, Health Services, scientific research and development

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Liofilchem®
 Address: Via Scozia, 64026 - Roseto degli Abruzzi (TE)
 Telephone number: 085/8930745
 Fax number: 085/8930330
 E-mail address: liofilchem@lioilchem.com

1.4 Emergency telephone number

+39 02-66101029 (Centro Antiveleni Niguarda Cà Granda - Milano).

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Flam. Liq. 3, Liquidi infiammabili (Category 3); H226
 Skin Corr. 1A, Skin corrosion (Category 1A); H314

2.2 Label elements

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

Pictogram



Signal word

Danger

Hazard statement(s)

H226 Flammable liquid and vapour
 H314 Causes severe skin burns and eye damage

Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
 P233 Keep container tightly closed
 P240 Ground and bond container and receiving equipment.
 P241 Use explosion-proof electrical/ventilating/light equipment.
 P242 Use only non-sparking tools.
 P243 Take precautionary measures to prevent static discharges.
 P260 Avoid release to the environment.
 P264 Wash hands thoroughly after handling
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
 P303 + P361 + P353 IF ON SKIN: Remove immediately all contaminated clothing. Rinse skin with water.
 P363 Wash contaminated clothing before reuse
 P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 P310 Immediately call a POISON CENTER or doctor
 P321 Specific treatment
 P305 + P351 + P338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

Supplemental Hazard Statements - none

2.3 Other hazards - This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures:

Hazardous substances

CAS n°	EC n°	Index n°	Registration number REACH	Concentration	Classification according Regulation (EC) No 1272/2008
Acetic acid					
7681-11-0	200-580-7	607-002-00-6	-	30.0 %	Flam. Liq. 3; Skin Corr. 1A; H226, H314
Sulfanilic acid					
121-57-3	204-482-5	-	-	0.8 %	Skin Irrit. 2; Eye Irrit. 2; Skin Sens. 1 ; H315, H317, H319

Additional Information:

For full text of H-statements, see SECTION 16

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Consult a physician

In case of eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult a physician

If swallowed: Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician

4.2 Most important symptoms and effects, both acute and delayed

no data available

4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

No data available.

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Ensure adequate ventilation. Do not inhale.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided

6.3 Methods and material for containment and cleaning up

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For information on safe handling, see Chapter 7.

For information on personal protection equipment see Chapter 8.

For disposal information see Chapter 13.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Provide appropriate exhaust ventilation at places where dust is formed. Do not eat, drink or smoke in work areas, wash hands after use; and remove contaminated clothing and protective equipment before entering areas where you eat.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature, see the product label.

7.3 Specific end uses

Apart from the uses described in section 1.2 are not covered other specific uses.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

- **Acetic acid**

DNEL: Workers – inhalation – acute local effects → 25 mg/m³
 DNEL: Workers – inhalation – long-term local effects → 25 mg/m³
 DNEL: Workers – skin contact – long term local effects → 10 mg/kg BW/d
 DNEL: Consumers – inhalation – acute local effects → 25 mg/m³
 DNEL: Consumers – inhalation - long term local effects → 25 mg*m³

PNEC: Soil → 0,478 mg/kg
 PNEC: Sea water → 0,3058 mg/l
 PNEC: Fresh water → 3,058 mg/l
 PNEC: Sea sediment → 1,136 mg/l
 PNEC: Fresh water sediment → 1,136 mg/kg
 PNEC: Sewage treatment plant → 85 mg/l
 PNEC: Aquatic intermittent release → 30,58 mg/l

8.2 Exposure controls

Exposure controls

Handle in accordance with good hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eyes/Face Protection: It is advisable wear safety goggles
 Skin protection: Handle with gloves
 Body Protection: Use protective clothes in accordance with laboratory good practices.
 Respiratory protection: It is advisable wear dust mask.

Environmental exposure control

For information relating to environmental precautions, see chapter 6.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Form Liquid
 Color Colourless

Odour

No data available

pH

No data available

Melting point/ freezing point

No data available

Initial boiling point and boiling range

> 35°C

Evaporation rate

No data available

Flammability (solid, gas)

No data available

Upper / lower flammability or explosive limits

No data available

Flash point

No data available

Auto-ignition temperature

No data available

Decomposition temperature

No data available

Vapour pressure

No data available

Vapour density

No data available

Relative density

No data available

Water solubility

Soluble

Partition coefficient: n-octanol/water

No data available

Viscosity

No data available

Explosive properties

No data available

Oxidizing properties

No data available

9.2 Other safety information

no data available

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

no data available

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

Exposure to direct solar light.

10.5 Incompatible materials

Zinc, Powdered metals, Iron, Copper, Nickel, Brass, Iron and iron salts.

10.6 Hazardous decomposition products

No decomposition when used for the intended uses.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity:

- **Acetic acid**
DL50 Oral – Rat – 3.310 mg/kg
CL50 Inhalation – Mouse – 4 h – 2.819 mg/l – steam
- **Sulphanilic acid**
DL50 Oral – Rat – 2.000 mg/kg
DL50 Dermic – Rat – 4 h – 2.000 mg/kg

Skin corrosion/irritation:

- **Acetic acid**
Dermal – Rabbit: Causes burns
- **Sulphanilic acid**
Causes skin irritation

Serious eye damage/eye irritation: Causes serious eye damage

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: negative

Carcinogenicity: no data available

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Additional information: RTECS: no data available

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

This mixture contains no substances evaluated PBT or vPvB

12.6 Endocrine disrupting properties

The mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

none

SECTION 13. DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods****Product**

Not be disposed of with household waste. Do not discharge into sewers.

The product must be specially treated adhering to official regulations administrative. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION**14.1 UN number**

ADR/RID: -UN 2790 IMDG: -UN 2790 IATA: -UN 2790

14.2 UN proper shipping name

ADR/RID: ACETIC ACID SOLUTION

IMDG: ACETIC ACID SOLUTION

IATA: ACETIC ACID SOLUTION

14.3 Transport hazard class(es)

ADR/RID: 8 IMDG: 8 IATA: 8

14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

14.5 Environmental hazards

ADR/RID: no IMDG: no IATA: no

14.6 Special precautions for user

no data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

15. REGULATORY INFORMATION

This safety datasheet complies with:

- the requirements of European Parliament and of the Council Regulation (EC) No. 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and Commission Regulation (EU) No. 453/2010 amending Commission Regulation (EC) No. 1907/2006.
- the requirements of Commission Regulation EU 2020/878

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

The product is classified, coded and labeled in accordance with EU Regulation on Hazardous Materials.

15.2 Chemical Safety Assessment

This product has not been made a chemical safety assessment.

16. OTHER INFORMATION**Text of H code(s) mentioned in Section 3**

Flam. Liq. 3, Liquidi infiammabili (Category 3); H226

Skin Corr. 1A, Skin corrosion (Category 1A); H314

Skin Irrit. 2 Skin irritation (Category 2)

Eye Irrit. 2 Eye irritation (Category 2)

Skin Sens. 1 Skin sensitisation (Category 1)

H226 Flammable liquid and vapour

H314 Causes severe skin burns and eye damage

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

Abbreviations and acronyms

- 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

Training advice

The product must be used by qualified personnel. It is recommended to provide basic training with regard to safety and health at work to ensure proper handling of the product.

Further information

The information in this document is based on the present state of our knowledge. The user must ensure the accuracy and completeness of such information in relation to the specific use intended.

Liofilchem® shall not be held liable for any damage resulting from handling or from contact with the above product. See www.liofilchem.com. for additional terms and conditions of sale.

Previous date: 22.09.2020

Revision date: 17.04.2023

Revision Number: rev. 3

ENGLISH

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers

Product name: Alpha Naphthylamine Reagent
 Product Number:: : \$080410-\$080417-\$080433

1.2 Identified uses of the relevant substance or mixture and uses advised against

Identified uses relevant: Professional uses, Health Services, scientific research and development

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Liofilchem®
 Address: Via Scozia, 64026 - Roseto degli Abruzzi (TE)
 Telephone number: 085/8930745
 Fax number: 085/8930330
 E-mail address: liofilchem@liofilchem.com

1.4 Emergency telephone number

+39 02-66101029 (Centro Antiveleni Niguarda Cà Granda - Milano).

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Flam. Liq. 3, Liquidi infiammabili (Category 3); H226
 Skin Corr. 1A, Skin corrosion (Category 1A); H314

2.2 Label elements

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

Pictogram



Signal word

Danger

Hazard statement(s)

H226 Flammable liquid and vapour
 H314 Causes severe skin burns and eye damage

Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
 P233 Keep container tightly closed
 P240 Ground and bond container and receiving equipment.
 P241 Use explosion-proof electrical/ventilating/light equipment.
 P242 Use only non-sparking tools.
 P243 Take precautionary measures to prevent static discharges.
 P260 Avoid release to the environment.
 P264 Wash hands thoroughly after handling
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
 P303 + P361 + P353 IF ON SKIN: Remove immediately all contaminated clothing. Rinse skin with water.
 P363 Wash contaminated clothing before reuse
 P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 P310 Immediately call a POISON CENTER or doctor
 P321 Specific treatment
 P305 + P351 + P338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

Supplemental Hazard Statements - none

2.3 Other hazards - This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures:

Hazardous substances

CAS n°	EC n°	Index n°	Registration number REACH	Concentration	Classification according Regulation (EC) No 1272/2008
Acetic acid					
7681-11-0	200-580-7	607-002-00-6	-	30.0 %	Flam. Liq. 3; Skin Corr. 1A; H226, H314
1-Naphthol					
90-15-3	201-969-4	604-029-00-5	-	0.2%	Acute Tox. 4; Acute Tox.3; Skin Irrit. 2; Eye Dam.1; Skin Sens. 1A; STOT SE 2; STOT SE 3; Aquatic Acute 1; Aquatic Chronic 3; H302, H311, H315, H318, H317, H371, H335,H400, H412 M-factor - Aquatic Acute: 1

Additional Information:

For full text of H-statements, see SECTION 16

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Consult a physician

In case of eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult a physician

If swallowed: Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician

4.2 Most important symptoms and effects, both acute and delayed

no data available

4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

No data available.

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Ensure adequate ventilation. Do not inhale.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided

6.3 Methods and material for containment and cleaning up

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For information on safe handling, see Chapter 7.
For information on personal protection equipment see Chapter 8.
For disposal information see Chapter 13.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Provide appropriate exhaust ventilation at places where dust is formed.
Do not eat, drink or smoke in work areas, wash hands after use; and remove contaminated clothing and protective equipment before entering areas where you eat.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
Recommended storage temperature, see the product label.

7.3 Specific end uses

Apart from the uses described in section 1.2 are not covered other specific uses.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

- **Acetic acid**

DNEL: Workers – inhalation – acute local effects → 25 mg/m³
DNEL: Workers – inhalation – long-term local effects → 25 mg/m³
DNEL: Workers – skin contact – long term local effects → 10 mg/kg BW/d
DNEL: Consumers – inhalation – acute local effects → 25 mg/m³
DNEL: Consumers – inhalation - long term local effects → 25 mg*m³

PNEC: Soil → 0,478 mg/kg
PNEC: Sea water → 0,3058 mg/l
PNEC: Fresh water → 3,058 mg/l
PNEC: Sea sediment → 1,136 mg/l
PNEC: Fresh water sediment → 1,136 mg/kg
PNEC: Sewage treatment plant → 85 mg/l
PNEC: Aquatic intermittent release → 30,58 mg/l

8.2 Exposure controls

Exposure controls

Handle in accordance with good hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eyes/Face Protection: It is advisable wear safety goggles
Skin protection: Handle with gloves
Body Protection: Use protective clothes in accordance with laboratory good practices.
Respiratory protection: It is advisable wear dust mask.

Environmental exposure control

For information relating to environmental precautions, see chapter 6.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Form Liquid
Color Colourless

Odour

No data available

pH

No data available

Melting point/ freezing point

No data available

Initial boiling point and boiling range

> 35°C

Evaporation rate

No data available

Flammability (solid, gas)

No data available

Upper / lower flammability or explosive limits

No data available

Flash point

No data available

Auto-ignition temperature

No data available

Decomposition temperature

No data available

Vapour pressure

No data available

Vapour density

No data available

Relative density

No data available

Water solubility

Soluble

Partition coefficient: n-octanol/water
Viscosity
Explosive properties
Oxidizing properties

No data available
No data available
No data available
No data available

9.2 Other safety information

no data available

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

no data available

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

Exposure to direct solar light.

10.5 Incompatible materials

Zinc, Powdered metals, Iron, Copper, Nickel, Brass, Iron and iron salts.

10.6 Hazardous decomposition products

No decomposition when used for the intended uses.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity:

- **Acetic acid**
DL50 Oral – Rat – 3.310 mg/kg
CL50 Inhalation – Mouse – 4 h – 2.819 mg/l – steam
- **1-Naphtol**
DL50 Oral – Rat – 1.000 - 2.000 mg/kg
DL50 Dermic – Rabbit > 880 mg/kg

Skin corrosion/irritation:

- **Acetic acid**
Dermal – Rabbit: Causes burns
- **1-Naphtol**
Causes skin irritation

Serious eye damage/eye irritation: Causes serious eye damage

Respiratory or skin sensitization:

Germ cell mutagenicity: negative

Carcinogenicity: no data available

- **1-Naphtol**
LLNA – Rat – Positive

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Additional information: RTECS: no data available

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Acute toxicity

- **1-Naphtol**
 LD50 Oral - Mouse - male and female - 1.000 - 2.000 mg/k
 LD50 Dermal - Rabbit - male - >= 880 mg/kg

Skin corrosion/irritation : Causes skin irritation

Serious eye damage/eye irritation:

- **1-Naphtol**
 Eyes - Chicken eye: Causes serious eye damage. - 10 s

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

Reproductive toxicity: No data available

Specific target organ toxicity - single exposure: No data available

Specific target organ toxicity - repeated exposure

Aspiration hazard: No data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

This mixture contains no substances evaluated PBT or vPvB

12.6 Endocrine disrupting properties

The mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

none

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Not be disposed of with household waste. Do not discharge into sewers.

The product must be specially treated adhering to official regulations administrative. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

14.1 UN number

ADR/RID: -UN 2790 IMDG: -UN 2790 IATA: -UN 2790

14.2 UN proper shipping name

ADR/RID: ACETIC ACID SOLUTION
 IMDG: ACETIC ACID SOLUTION
 IATA: ACETIC ACID SOLUTION

14.3 Transport hazard class(es)

ADR/RID: 8 IMDG: 8 IATA: 8

14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

14.5 Environmental hazards

ADR/RID: no IMDG: no IATA: no

14.6 Special precautions for user

no data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

15. REGULATORY INFORMATION

This safety datasheet complies with:

- the requirements of European Parliament and of the Council Regulation (EC) No. 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and Commission Regulation (EU) No. 453/2010 amending Commission Regulation (EC) No. 1907/2006.
- the requirements of Commission Regulation EU 2020/878

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

The product is classified, coded and labeled in accordance with EU Regulation on Hazardous Materials.

15.2 Chemical Safety Assessment

This product has not been made a chemical safety assessment.

16. OTHER INFORMATION

Text of H code(s) mentioned in Section 3

Acute Tox. 4 Acute Toxicity (Category 4)
Acute Tox. 3 Acute Toxicity (Category 3)
Skin Irrit. 2 Skin irritation (Category 2)
Eye Dam. 1 Serious eye damage (Category 1)
STOT SE 3 Specific target organ toxicity - single exposure (Category 3)
Aquatic Chronic 2 Tossicità cronica per l'ambiente acquatico (Category 2)
H302 Harmful if swallowed..
H311 Toxic in contact with skin.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H335 Harmful if swallowed.
H411 Toxic to aquatic life with long lasting effects.

Abbreviations and acronyms

- 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

Training advice

The product must be used by qualified personnel. It is recommended to provide basic training with regard to safety and health at work to ensure proper handling of the product.

Further information

The information in this document is based on the present state of our knowledge. The user must ensure the accuracy and completeness of such information in relation to the specific use intended.

Liofilchem® shall not be held liable for any damage resulting from handling or from contact with the above product. See www.liofilchem.com. for additional terms and conditions of sale.

Previous date: 01.06.2015

Revision date: 17.04.2023

Revision Number: rev. 6

ENGLISH

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers

Product name: Kovac's Reagent

Product Number: 80271-87001-\$080401-\$080413-\$080415-\$080435

1.2 Identified uses of the relevant substance or mixture and uses advised against

Identified uses relevant: Professional uses, Health services, scientific research and development

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Liofilchem®

Address: Via Scozia, 64026 - Roseto degli Abruzzi (TE)

Telephone number: 085/8930745

Fax number: 085/8930330

E-mail address: liofilchem@liofilchem.com

1.4 Emergency telephone number

+39 02-66101029 (Centro Antiveleni Niguarda Cà Granda - Milano).

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Flam. Liq. 3, Flammable liquids (Category 3); H226

Skin Corr. 1B, Skin corrosion (Category 1B); H314

Eye Dam. 1, Serious eye damage (Category 1); H318

STOT SE 3, Specific target organ toxicity - single exposure (Category 3); H335, H336

2.2 Label elements

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

Pictogram



Signal word

Danger

Hazard statement(s)

H226 Flammable liquid and vapour.
 H314 Causes severe skin burns and eye damage.
 H318 Causes serious eye damage.
 H335 May cause respiratory irritation.
 H336 May cause drowsiness or dizziness.

Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, flames and other sources of ignition. No smoking.
 P243 Take precautionary measures against static discharge.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
 P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER or doctor/physician

Supplemental Hazard Statements none

2.3 Other hazards – none

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous substances

CAS n°	EC n°	Index n°	Registration number REACH	Concentration	Classification according Regulation (EC) No 1272/2008
Isobutyl alcohol					
78-83-1	201-148-0	603-108-00-1	-	75.0%	Flam. Liq. 3; Skin Irrit. 2; Eye Dam. 1; STOT SE 3; H226, H315, H318, H335, H336
Chloridric acid 37%					
7647-01 -0	231-595-7	-	-	25.0%	Met. Corr. 1; Skin Corr. 1B; STOT SE 3; H290, H314, H318 H335
4-Dimethylaminobenzaldehyde					
100-10-7	202-819-0			0,5 g/l	Skin Sens. 1B; H317

Additional Information:

For the full text of H codes mentioned in this section, see section 16

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Wash with plenty of soap and water. Consult a physician.

In case of eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult a physician.

If swallowed: Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

no data available

4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Oxides of Carbon.

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Remove all sources of ignition. Ensure adequate ventilation.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For information on safe handling, see Chapter 7.

For information on personal protection equipment see Chapter 8.

For disposal information see Chapter 13.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. Do not eat or drink in work areas, wash hands after use; and remove contaminated clothing and protective equipment before entering areas where you eat.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
 Recommended storage temperature, see the product label.

7.3 Specific end uses

Apart from the uses described in section 1.2 are not covered other specific uses.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

- Isobutyl alcohol

Derived No Effect Level (DNEL)			
Application Area	Routes of exposure	Health effect	Value
Worker DNEL, longterm	inhalation	Long-term local effects	310 mg/m3
Consumer DNEL, longterm	Oral	Long-term systemic effects	
Consumer DNEL, longterm	inhalation	Long-term local effects	mg/m3
Predicted No Effect Concentration (PNEC)			
Fresh water		0,4 mg/l	
Sea water		0,04 mg/l	
Aquatic intermittent release		11 mg/l	
Fresh water sediment		1,52 mg/kg	
Sea sediment		0,152 mg/kg	
Soil		0,07 mg/kg	
Sewage treatment plant		10 mg/l	

- Chloridric acid 37 %

IOLEV (UE)	Short-term value: 15 mg/m3, 10 ppm Long-term value: 8 mg/m3, 5 ppm
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8.2 Exposure controls

Exposure controls

Handle in accordance with good hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eyes/Face Protection: It is advisable wear safety goggles

Skin protection: Handle with gloves

Body Protection: Use protective clothes in accordance with laboratory good practices.

Respiratory protection: It is advisable wear dust mask.

Environmental exposure control

For information relating to environmental precautions, see chapter 6.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Form Liquid
 Color Yellow

Odour

No data available

Odour Threshold

No data available

pH

No data available

Melting point/ freezing point

No data available

Initial boiling point and boiling range

> 35°C

Flash point

> 23°C - < 60°C

Evaporation rate

No data available

Flammability (solid, gas)

No data available

Upper / lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Water solubility	soluble
Partition coefficient: n-octanol/water	No data available
Autoignition temperature	Product not selfigniting
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

9.2 Other safety information
 no data available

SECTION 10. STABILITY AND REACTIVITY

- 10.1 Reactivity**
 no data available
- 10.2 Chemical stability**
 Stable under recommended storage conditions
- 10.3 Possibility of hazardous reactions**
 no data available
- 10.4 Conditions to avoid**
 Heat, flames and sparks.
- 10.5 Incompatible materials**
 Alkali metals, Oxidizing agents, Peroxides.
- 10.6 Hazardous decomposition products**
 No decomposition when used for the intended uses.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

- **Isobutyl alcohol (CAS NO. 78-83-1)**
 - Acute toxicity**
 LD50 Oral - Rat - female - 3.350 mg/kg
 LC50 Inhalation - Rat - male and female - 4 h - 24,6 mg/l – vapor
 LD50 Dermal - Rabbit - female - 2.460 mg/kg
 - Skin corrosion/irritation**
 Skin – Rabbit
 Result: Irritating to skin. - 24 h
 - Serious eye damage/eye irritation**
 Eyes - Rabbit
 Result: Corrosive - 24 h
 - Respiratory or skin sensitization**
 No data available
 - Germ cell mutagenicity** : negative
 - Carcinogenicity** No data available
 - Reproductive toxicity** No data available
 - Specific target organ toxicity** - May cause respiratory irritation. - Respiratory Tract
 May cause drowsiness or dizziness. - Central nervous system
 - Specific target organ toxicity - repeated exposure** No data available
 - Aspiration hazard** No data available

- **Chloridric acid 37% (CAS NO. 7647-01 -0)**
 - Acute toxicity** No data available
 - Skin corrosion/irritation**
 Causes severe skin burns and eye damage.
 - Serious eye damage/eye irritation**
 Strong caustic effect.
 Strong irritant with the danger of severe eye injury.
 Causes serious eye damage.
 - Inhalation:**
 Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
 Harmful if inhaled. May cause respiratory tract irritation.

May cause respiratory irritation
Respiratory or skin sensitization No data available
Germ cell mutagenicity : No data available
Carcinogenicity No data available
Reproductive toxicity No data available
Specific target organ toxicity - May cause respiratory irritation. - Respiratory Tract
Specific target organ toxicity - repeated exposure No data available
Aspiration hazard No data available

Additional information: RTECS: no data available

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity
 1-Naphthol effects are: Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 4,1 - 4,7 mg/l - 96 h

12.2 Persistence and degradability
 no data available

12.3 Bioaccumulative potential
 no data available

12.4 Mobility in soil
 no data available

12.5 Results of PBT and vPvB assessment
 This mixture contains no substances evaluated PBT or vPvB

12.6 Endocrine disrupting properties
 The mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects
 no data available

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Product
 Not be disposed of with household waste. Do not discharge into sewers.
 The product must be specially treated adhering to official regulations administrative. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging
 Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

14.1 UN number
 ADR/RID: UN 2924 IMDG: UN 2924 IATA: UN 2924

14.2 UN proper shipping name
 ADR/RID: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (Isobutyl alcohol - Chloridric acid)
 IMDG: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (Isobutyl alcohol - Chloridric acid)
 IATA: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (Isobutyl alcohol - Chloridric acid)

14.3 Transport hazard class(es)
 ADR/RID: 3 (8) IMDG: 3 (8) IATA: 3 (8)

14.4 Packaging group
 ADR/RID: III IMDG: III IATA: III

14.5 Environmental hazards
 ADR/RID: no IMDG: no IATA: no

14.6 Special precautions for user
 no data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
 no data available

SECTION 15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of European Parliament and of the Council Regulation (EC) No. 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and Commission Regulation (EU) No. 453/2010 amending Commission Regulation (EC) No. 1907/2006.

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

The product is classified, coded and labeled in accordance with EU Regulation on Hazardous Materials.

15.2 Chemical Safety Assessment

This product has not been made a chemical safety assessment.

SECTION 16. OTHER INFORMATION

Text of H code(s) and R-phrases mentioned in Section 3

Flam. Liq. 3, Flammable liquids (Category 3);
Skin Corr. 1B, Skin corrosion (Category 1B);
Eye Dam. 1, Serious eye damage (Category 1);
STOT SE 3, Specific target organ toxicity - single exposure (Category 3);
H226 Flammable liquid and vapour
H290 May be corrosive to metals
H314 Causes severe skin burns and eye damage
H315 Causes skin irritation
H318 Causes serious eye damage
H335 May cause respiratory irritation
H336 May cause drowsiness or dizziness

Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
CLP: Regulation concerning the classification, labelling and packaging of substances and mixtures, Regulation (EC) No. 1272/2008.
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
IATA: International Air Transport Association
IMDG: International Maritime Code for Dangerous Goods
CL50: Middle lethal concentration of individuals in essay
DL50: The median lethal dose that causes death in 50% of individuals in essay
PBT: Persistent, bioaccumulative and toxic substance
REACH: Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), Regulation (EC) No. 1907/2006
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail
vPvB: Very persistent and very bioaccumulative substance

Training advice

The product must be used by qualified personnel. It is recommended to provide basic training with regard to safety and health at work to ensure proper handling of the product.

Further information

This sheet replaces any previous edition.
The information in this document is based on the present state of our knowledge. The user must ensure the accuracy and completeness of such information in relation to the specific use intended.
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Previous date: 01.06.2015

Revision date: 17.04.2023

Revision Number: rev. 4

ENGLISH

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers

Product name: Alpha Naphthol Reagent
 Product Number: \$080403-\$080431-88035A-87002B-87007B

1.2 Identified uses of the relevant substance or mixture and uses advised against

Identified uses relevant: Professional uses, Health services, scientific research and development

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Liofilchem®
 Address: Via Scozia, 64026 - Roseto degli Abruzzi (TE)
 Telephone number: 085/8930745
 Fax number: 085/8930330
 E-mail address: liofilchem@liofilchem.com

1.4 Emergency telephone number

+39 02-66101029 (Centro Antiveleni Niguarda Cà Granda - Milano).

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Flam. Liq. 2, Flammable liquids (Category 2); H225
 Eye Dam. 1, Serious eye damage (Category 1); H318
 Aquatic Chronic 3 Chronic toxicity to the aquatic environment (Category 3); H412

2.2 Label elements

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

Pictogram



Signal word

Danger

Hazard statement(s)

H225 Highly flammable liquid and vapour.
 H318 Causes serious eye damage.
 H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
 P243 Take precautionary measures against static discharge.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER or doctor/physician.

Supplemental Hazard Statements none

2.3 Other hazards - none

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous substances

CAS n°	EC n°	Index n°	Registration number REACH	Concentration	Classification according Regulation (EC) No 1272/2008
Ethyl alcol					
64-17-5	200-578-6	603-002-00-5	-	<= 100%	Flam. Liq. 2; H225
1-Naphthol					
90-15-3	201-969-4	604-029-00-5	-	6.0%	Acute Tox. 4; Acute Tox. 3; Skin Irrit. 2; Eye Dam. 1; STOT SE 3; Aquatic Chronic 2; H302, H311, H315, H318, H335, H411

Additional Information:

For the full text of H codes mentioned in this section, see section 16

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

EYES: Rinse opened eye for several minutes under running water. Then consult a doctor. Seek immediate medical advice.

SKIN: Immediately wash with water and soap and rinse thoroughly. Wash contaminated clothing before reuse. If skin irritation continues, consult a doctor.

INGESTION: Call for a doctor immediately

INHALATION: Supply fresh air; consult a doctor in case of complaints.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available

4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Water

CO2 or alcohol resistant foam

5.2 Special hazards arising from the substance or mixture

Oxides of Carbon.

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

Keep away any ignition source.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

6.2 Environmental precautions

Do not allow to penetrate the ground/soil.

Dilute with plenty of water after collecting the liquid.

Prevent seepage into sewage system, workpits and cellars.

6.3 Metodi e materiali per il contenimento e per la bonifica

Collect the liquid with vacuum in a suitable container and absorb the remainder with a porous material (diatomite, acid binders, universal binders, etc).

Ensure adequate ventilation.

6.4 Reference to other sections

For information on safe handling, see Chapter 7.

For information on personal protection equipment see Chapter 8.

For disposal information see Chapter 13.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. Do not eat or drink in work areas, wash hands after use; and remove contaminated clothing and protective equipment before entering areas where you eat.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
Recommended storage temperature, see the product label.

7.3 Specific end uses

Apart from the uses described in section 1.2 are not covered other specific uses.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

- **Ethanol**

- Dermal (DNEL workers-systemic chronic effects): 343 mg/kg
- Inhalative (DNEL workers-local effects acute): 19 mg/m³
- Inhalative (DNEL workers-local chronic effects): 950 mg/kg
- PNEC (Fresh water): 0,96 mg/l
- PNEC (Freshwater sediment): 3,6 mg/kg
- PNEC (Marine water): 0,79 mg/l
- PNEC (Seawater sediment): 2,9 mg/l
- PNEC (STP): 580 mg/l
- PNEC (Soil): 0,63 mg/kg

8.2 Exposure controls

Exposure controls

Handle in accordance with good hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eyes/Face Protection: It is advisable wear safety goggles

Skin protection: Handle with gloves

Body Protection: Use protective clothes in accordance with laboratory good practices.

Respiratory protection: It is advisable wear dust mask.

Environmental exposure control

For information relating to environmental precautions, see chapter 6.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Form	Liquid
Color	Beige

Odour

No data available

Odour Threshold

No data available

pH

No data available

Melting point/ freezing point

No data available

Initial boiling point and boiling range

> 35°C

Flash point

< 23°C

Evaporation rate

No data available

Flammability (solid, gas)

No data available

Upper / lower flammability or explosive limits

No data available

Vapour pressure

No data available

Vapour density

No data available

Relative density

No data available

Water solubility

soluble

Partition coefficient: n-octanol/water

No data available

Autoignition temperature

Product not selfigniting

Decomposition temperature

No data available

Viscosity

No data available

Explosive properties

No data available

Oxidizing properties

No data available

9.2 Other safety information

no data available

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

no data available

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

Alkali metals, Oxidizing agents, Peroxides.

10.6 Hazardous decomposition products

No decomposition when used for the intended uses.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity:

- **1-Naphtol**
DL50 Oral – Rat – 1.000 - 2.000 mg/kg
DL50 Dermic – Rabbit > 880 mg/kg

Skin corrosion/irritation:

- **1-Naphtol**
Causes skin irritation

Serious eye damage/eye irritation: Causes serious eye damage

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

Carcinogenicity:

- **1-Naphtol**
LLNA – Rat – Positive

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Additional information: RTECS: no data available

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Acute toxicity

- **Ethanol**
EC50/48h: 5,012 mg/l (Daphnia)
EC50: 72 mg/L (algae)
LC50/96h: 11,200 mg/l (fishes)
- **1-Naphtol**
LD50 Oral - Mouse - male and female - 1.000 - 2.000 mg/k
LD50 Dermal - Rabbit - male - >= 880 mg/kg

Skin corrosion/irritation : Causes skin irritation

Serious eye damage/eye irritation:

- **1-Naphtol**
Eyes - Chicken eye: Causes serious eye damage. - 10 s

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

Reproductive toxicity: No data available

Specific target organ toxicity - single exposure: No data available

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Specific target organ toxicity - repeated exposure

Aspiration hazard: No data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

This mixture contains no substances evaluated PBT or vPvB

12.6 Endocrine disrupting properties

The mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

none

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Not be disposed of with household waste. Do not discharge into sewers.

The product must be specially treated adhering to official regulations administrative. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

SECTION 14. INFORMAZIONI SUL TRASPORTO

14.1 UN number

ADR/RID: UN 1170 IMDG: UN 1170 IATA: UN 1170

14.2 UN proper shipping name

ADR/RID: ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

IMDG: ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

IATA: ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

14.3 Transport hazard class(es)

ADR/RID: 3 IMDG: 3 IATA: 3

14.4 Packaging group

ADR/RID: II IMDG: II IATA: II

14.5 Environmental hazards

ADR/RID: no IMDG: no IATA: no

14.6 Special precautions for user

no data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

SECTION 15. REGULATORY INFORMATION

This safety datasheet complies with:

- the requirements of European Parliament and of the Council Regulation (EC) No. 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and Commission Regulation (EU) No. 453/2010 amending Commission Regulation (EC) No. 1907/2006.
- the requirements of Commission Regulation EU 2020/878

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

The product is classified, coded and labeled in accordance with EU Regulation on Hazardous Materials.

15.2 Chemical Safety Assessment

This product has not been made a chemical safety assessment.

SECTION 16. OTHER INFORMATION

Text of H code(s) and R-phrases mentioned in Section 3

Acute Tox. 4 Acute toxicity (Category 4)
Acute Tox. 3 Acute toxicity (Category 3)
Skin Irrit. 2 Irritazione cutanea (Categoria 2)
STOT SE 3 Specific target organ toxicity - single exposure (Category 3)
Aquatic Chronic 2 Chronic toxicity to the aquatic environment (Category 2)
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H315 Causes skin irritation.
H335 May cause respiratory irritation.
H411 Toxic to aquatic life with long lasting effects.

Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
CLP: Regulation concerning the classification, labelling and packaging of substances and mixtures, Regulation (EC) No. 1272/2008.
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
IATA: International Air Transport Association
IMDG: International Maritime Code for Dangerous Goods
CL50: Middle lethal concentration of individuals in essay
DL50: The median lethal dose that causes death in 50% of individuals in essay
PBT: Persistent, bioaccumulative and toxic substance
REACH: Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), Regulation (EC) No. 1907/2006
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail
vPvB: Very persistent and very bioaccumulative substance

Training advice

The product must be used by qualified personnel. It is recommended to provide basic training with regard to safety and health at work to ensure proper handling of the product.

Further information

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The information in this document is based on the present state of our knowledge. The user must ensure the accuracy and completeness of such information in relation to the specific use intended.
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