

ENGLISH

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

1.1 Product identifiers

Product name: Nitrate Test
Product Number: 88009

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

Identified uses relevant: Professional uses, 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 Antiveneni Niguarda Cà Granda - Milano).

This is a summary MSDS for a kit, for the full MSDS for each of the components refer to section 16.

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]

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
P243 Take precautionary measures to prevent static discharges.
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
P310 Immediately call a POISON CENTER or doctor
P305 + P351 + P338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P243 Take precautionary measures to prevent static discharges.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Supplemental Hazard Statements - none

2.3 Other hazards - This substance/mixture does not contain components considered to be both persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at concentrations of 0.1% or higher.

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

3. COMPOSITION / INFORMATION ON INGREDIENTS

Refer to component MSDS

4. FIRST AID MEASURES

Refer to component MSDS

5. FIRE-FIGHTING MEASURES

Refer to component MSDS

6. ACCIDENTAL RELEASE MEASURES

Refer to component MSDS

7. HANDLING AND STORAGE

Refer to component MSDS

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Refer to component MSDS

9. PHYSICAL AND CHEMICAL PROPERTIES

Refer to component MSDS

10. STABILITY AND REACTIVITY

Refer to component MSDS

11. TOXICOLOGICAL INFORMATION

Refer to component MSDS

12. ECOLOGICAL INFORMATION

Refer to component MSDS

13. DISPOSAL CONSIDERATIONS

Refer to component MSDS

14. INFORMAZIONI SUL TRASPORTO

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: - IMDG: - IATA: -

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.

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.
The product does not contain any restricted substances – Article XIV & Article XVIII REACH

15.2 Chemical Safety Assessment

This product has not been made a chemical safety assessment.

16. OTHER INFORMATION

Kit Components:

\$88009	Nitrate Test	Not Dangerous
080418	Sulphanilic Acid Reagent	Flam. Liq. 3, Flammable liquids (Category 3) Skin Corr. 1A, Skin corrosion (Category 1A)
080417	Alpha-Naphthylamine Reagent	Flam. Liq. 3, Flammable liquids (Category 3) Skin Corr. 1A, Skin corrosion (Category 1A)

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.

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: 19.03.2025

Revision Number: rev. 4

Code Number (REF):	\$88009
Description:	Nitrate Test
Date of revision:	Rev. 4 del 19.03.2025

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).

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

Nallira Matteo
Regulatory Affairs
(signature on file)

Liofilchem®
64026 Roseto degli Abruzzi, Italy
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: 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
P243 Take precautionary measures to prevent static discharges.
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
P310 Immediately call a POISON CENTER or doctor
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 does not contain components considered to be both persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at concentrations of 0.1% or higher.
The substance/mixture does not contain components considered to have endocrine disrupting properties in accordance with Article 57(f) of REACH or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 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					
64-19-7	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

SAFETY DATA SHEET

(According to Regulation EC n° 1907/2006 and to
Commission Regulation EU 2020/878)
Revision: 7 / Revision Date: 19.03.2025

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:

- **1-Naphtol**
Causes skin irritation

Serious eye damage/eye irritation:

- **1-Naphtol**
Causes serious eye damage

Respiratory or skin sensitization:

- **1-Naphtol**
LLNA – Mouse – Positive

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

11.2 Other informations

Endocrine disrupting properties: The substance/mixture does not contain components considered to have endocrine disrupting properties in accordance with Article 57(f) of REACH or Commission Delegated Regulation (EU) 2017/2100 or Regulation (EU) 2018/605 of the Commission at levels of 0.1% or higher

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

- **Acetic acid (CAS no. 64-19-7)**
semi-static test LC50 - *Oncorhynchus mykiss* (rainbow trout) - > 1.000 mg/l - 96 h
static test EC50 - *Daphnia magna* (Water flea) - > 1.000 mg/l - 48 h
static test EC50 - *Skeletonema costatum* - > 1.000 mg/l - 72 h
EC5 - *Pseudomonas putida* - 2.850 mg/l - 16 h
microtox test EC50 - *Photobacterium phosphoreum* - 11 mg/l - 15 min
- **1-Naphtol**
LD50 Oral - Mouse - male and female - 1.000 - 2.000 mg/k
LD50 Dermal - Rabbit - male - >= 880 mg/kg

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.
The product does not contain any restricted substances – Article XIV & Article XVIII REACH

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: 17.04.2023
Revision date: 19.03.2025
Revision Number: rev. 7

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@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
 P243 Take precautionary measures to prevent static discharges.
 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
 P310 Immediately call a POISON CENTER or doctor
 P305 + P351 + P338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
 P243 Take precautionary measures to prevent static discharges.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Supplemental Hazard Statements - none

2.3 Other hazards - This substance/mixture does not contain components considered to be both persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at concentrations of 0.1% or higher.

The substance/mixture does not contain components considered to have endocrine disrupting properties in accordance with Article 57(f) of REACH or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 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					
64-19-7	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	Coulourless

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**11.2 Other informations**

Endocrine disrupting properties: The substance/mixture does not contain components considered to have endocrine disrupting properties in accordance with Article 57(f) of REACH or Commission Delegated Regulation (EU) 2017/2100 or Regulation (EU) 2018/605 of the Commission at levels of 0.1% or higher

SECTION 12. ECOLOGICAL INFORMATION**12.1 Toxicity**

- **Acetic acid (CAS no. 64-19-7)**
semi-static test LC50 - Oncorhynchus mykiss (rainbow trout) - > 1.000 mg/l - 96 h
static test EC50 - Daphnia magna (Water flea) - > 1.000 mg/l - 48 h
static test EC50 - Skeletonema costatum - > 1.000 mg/l - 72 h
EC5 - Pseudomonas putida - 2.850 mg/l - 16 h
microtox test EC50 - Photobacterium phosphoreum - 11 mg/l - 15 min

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.

The product does not contain any restricted substances – Article XIV & Article XVIII REACH

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.

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