



Revision: 6 / Revision Date: 01.06.2015

ENGLISH

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, zona industriale, 64026 - Roseto degli Abruzzi (TE)

Telephone number: 085/8930745 Fax number: 085/8930330

E-mail address: liofilchem@liofilchem.net

1.4 Emergency telephone number

+39 02-66101029 (Centro Antiveleni 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. 2, Flammable liquids (Category 2); H225 Skin Corr. 1A, Skin corrosion (Category 1A); 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



Signal word Danger

Hazard statement(s)

H225 Highly 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.

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.

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

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

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6. ACCIDENTAL RELEASE MEASURES

Refer to component MSDS

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.

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

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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.

16. OTHER INFO	RMATION	
Kit Components 080402	: NaOH 40% Reagent	Skin Corr. 1A, Skin corrosion (Category 1A)
080414	H ₂ O ₂ Reagent	Skin Corr. 1A, Skin corrosion (Category 1A)
80411	Vaseline oil	Not Dangerous
080412	Methyl Red Reagent	Flam. Liq. 2, Flammable liquids (Category 2)
080406	Sulphanilic Acid Reagent	Flam. Liq. 3, Flammable liquids (Category 3) Skin Corr. 1A, Skin corrosion (Category 1A)
080410	Alpha Naphthylamine Reagent	Flam. Liq. 3, Flammable liquids (Category 3) Skin Corr. 1A, Skin corrosion (Category 1A)
080413	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)
080403	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)

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.

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.net. for additional terms and conditions of sale.

Previous date: 19.09.2014 Revision date: 01.06.2015 Revision Number: rev. 6

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ENGLISH

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

1.1 Product identifiers

Product name: NaOH 40% Reagent

Product Number: 080402

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, zona industriale, 64026 - Roseto degli Abruzzi (TE)

Telephone number: 085/8930745 Fax number: 085/8930330

E-mail address: liofilchem@liofilchem.net **1.4 Emergency telephone number**

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

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)

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

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous substances

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

Additional Information:

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

4. FIRST AID MEASURES

4.1 Description of first aid measures

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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

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.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas.. 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 Metodi e materiali per il contenimento e per la bonifica

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.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. 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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Sodium Hydroxide: 1310-73-2

TWA (Italy) Short-term value: C 2 mg/m³

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.

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SAFETY DATA SHEET

Environmental exposure control

For information relating to environmental precautions, see chapter 6.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Form Liquid Color Colourless

Odour No data available **Odour Threshold** No data available No data available Melting point/ freezing point No data available Initial boiling point and boiling range No data available Flash point No data available No data available **Evaporation rate** 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 No data available Partition coefficient: n-octanol/water No data available **Autoignition temperature** No data available **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

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

no data available

10.5 Incompatible materials

Strong oxidizing agents, Strong acids, Organic materials.

10.6 Hazardous decomposition products

No decomposition when used for the intended uses.

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

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(According to Regulation EC n° 1907/2006)

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Aspiration hazard: no data available

Additional information: RTECS: no data available

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 Other adverse effects

no data available

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.

14. INFORMAZIONI SUL TRASPORTO

14.1 UN number

ADR/RID: UN 1824 IMDG: UN 1824 IATA: 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 IMDG: 8 IATA: 8

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.

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.

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(According to Regulation EC n° 1907/2006)

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16. OTHER INFORMATION

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.net. for additional terms and conditions of sale.

Previous date: 25.05.2012 Revision date: 01.06.2015 Revision Number: rev. 4

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ENGLISH

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

1.1 Product identifiers

Product name: H₂O₂ Reagent

Product Number: 080414-080419-\$87008

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, zona industriale, 64026 - Roseto degli Abruzzi (TE)

Telephone number: 085/8930745 Fax number: 085/8930330

E-mail address: liofilchem@liofilchem.net **1.4 Emergency telephone number**

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

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)

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

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous substances

CAS n°	EC n°	Index n°	Registration number REACH	Concentration	Classification Regulation 1272/2008	according (EC) No			
Hydrogen pero	Hydrogen peroxide								
7722-84-1	231-765-0	008-003-00-9	-	7.5%	Ox. Liq. 1; A Skin Corr. 1A + H332, H314	; H271, H302			

Additional Information:

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

4. FIRST AID MEASURES

4.1 Description of first aid measures





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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

5. FIRE-FIGHTING MEASURES

Liofilchem®

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.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas.. 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 Metodi e materiali per il contenimento e per la bonifica

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.

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. 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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit value.

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.





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Environmental exposure control

For information relating to environmental precautions, see chapter 6.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Form Liquid Color Colourless

Odour No data available **Odour Threshold** No data available No data available Melting point/ freezing point No data available Initial boiling point and boiling range No data available Flash point No data available **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 No data available Partition coefficient: n-octanol/water No data available **Autoignition temperature** No data available **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

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.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity:

Hydrogen peroxide effects are: LD50 Oral - Rat - 376 mg/kg

LD50 Dermal - Rat - 4.060 mg/kg

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

Carcinogenicity: This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC,

ACGIH, NTP, or EPA classification. (Hydrogen peroxide)

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Hydrogen peroxide)

Reproductive toxicity: no data available



(According to Regulation EC n° 1907/2006)

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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

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 Other adverse effects

no data available

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.

14. INFORMAZIONI SUL TRASPORTO

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.

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.



(According to Regulation EC n° 1907/2006)

Revision: 6 / Revision Date: 01.06.2015

16. OTHER INFORMATION

Text of R-phrase(s) mentioned in Section 3

Ox. Lig. 1 Oxidizing liquid (Category 1) Acute Tox. 4 Acute Tocity (Category 4)

H271 May cause fire or explosion; strong oxidiser

H302 + H332 Harmful if swallowed or inhaled

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: 22.10.2014 Revision date: 01.06.2015 Revision Number: rev. 6





Revision: 4 / Revision Date: 01.06.2015

ENGLISH

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

1.1 Product identifiers

Product name: Vaselin oil

Product Number: 80278-80279-80408-80411-87006

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, zona industriale, 64026 - Roseto degli Abruzzi (TE)

Telephone number: 085/8930745 Fax number: 085/8930330

E-mail address: liofilchem@liofilchem.net **1.4 Emergency telephone number**

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

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This product does not meet the criteria for classification in any hazard class in accordance to Regulation (EC) No. 1272/2008. concerning the classification, labelling and packaging of substances and mixtures.

2.2 Label elements

The product does not need to be labeled in accordance with EC directives or respective national laws.

2.3 Other hazards - none

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous substances

The product does not need to be labeled in accordance with EC directives or respective national laws.

Additional Information:

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

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 off with soap and plenty of water.

In case of eye contact: As precaution, flush eyes with water as a precaution.

If swallowed: 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

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

Carbon monoxide, carbon dioxide, fumes of unburnt hydrocarbons.

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Ensure adequate ventilation.





Revision: 4 / Revision Date: 01.06.2015

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 Metodi e materiali per il contenimento e per la bonifica

Pick up and arrange disposal without creating dust. Sweep up and shovel. 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.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit value.

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.

No data available

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Odour

Form Liquid Color Colorless

Odour Threshold No data available No data available pН Melting point/ freezing point No data available Initial boiling point and boiling range No data available Flash point No data available No data available **Evaporation rate** Flammability (solid, gas) No data available Upper / lower flammability or explosive limits No data available Vapour pressure at 20°C max 0.01 Vapour density No data available 0.864 - 0.877 at 15°C Relative density

Water solubility soluble

Partition coefficient: n-octanol/waterNo data availableAutoignition temperatureProduct not selfignitingDecomposition temperatureNo data availableViscosityNo data availableExplosive propertiesProduct is not explosiveOxidizing propertiesNo data available

9.2 Other safety information

no data available



(According to Regulation EC n° 1907/2006)

Revision: 4 / Revision Date: 01.06.2015

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 other ignition source.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

No decomposition when used for the intended uses.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity: no data available

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available 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 a

carcinogen by IARC or expected.

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

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 Other adverse effects

no data available

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.



(According to Regulation EC n° 1907/2006)

Revision: 4 / Revision Date: 01.06.2015

14. INFORMAZIONI SUL TRASPORTO

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.

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

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: 10.09.2013 Revision date: 01.06.2015 Revision Number: rev. 4



(According to Regulation EC n° 1907/2006)

Revision: 4 / Revision Date: 01.06.2015

ENGLISH

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

1.1 Product identifiers

Product name: Methyl Red Reagent

Product Number: 080412

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, zona industriale, 64026 - Roseto degli Abruzzi (TE)

Telephone number: 085/8930745 Fax number: 085/8930330

E-mail address: liofilchem@liofilchem.net 1.4 Emergency telephone number

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

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 Tenere lontano da fonti di calore, superfici riscaldate, scintille, fiamme e altre fonti di innesco.

Vietato fumare.

P243 Take precautionary measures against static discharge.

Supplemental Hazard Statements none

2.3 Other hazards - none

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous substances

CAS n°	EC n°	Index n°	Registration number REACH	Concentration	Classification Regulation 1272/2008	accord (EC)	ing No	
Ethyl alcol								
64-17-5	200-578-6	603-002-00-5	-	60.0 %	Flam. Liq. 2; H	225		

Additional Information:

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

4. FIRST AID MEASURES

4.1 Description of first aid measures

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(According to Regulation EC n° 1907/2006)

Revision: 4 / Revision Date: 01.06.2015

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 immediately with plenty of water for at least 15 minutes and 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

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

Carbon oxides

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

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 Metodi e materiali per il contenimento e per la bonifica

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.

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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit value.

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.

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(According to Regulation EC n° 1907/2006)

Revision: 4 / Revision Date: 01.06.2015

Environmental exposure control

For information relating to environmental precautions, see chapter 6.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Form Liquid Color Red

OdourNo data availableOdour ThresholdNo data availablepHNo data availableMelting point/ freezing pointNo data available

Initial boiling point and boiling range > 35°C Flash point < 23°C

Evaporation rate

Flammability (solid, gas)

Upper / lower flammability or explosive limits

Vapour pressure

Vapour density

Relative density

No data available

Water solubility

No data available

Soluble

Water solubility
Partition coefficient: n-octanol/water
Autoignition temperature
Product not selfigniting
Decomposition temperature
No data available
Viscosity
No data available
Explosive properties
Product is not explosive
Oxidizing properties
No data available

9.2 Other safety information

no data available

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.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity: no data available

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available 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

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(According to Regulation EC n° 1907/2006)

Revision: 4 / Revision Date: 01.06.2015

Aspiration hazard: no data available

Additional information: RTECS: no data available

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 Other adverse effects

no data available

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.

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

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.

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MSDS Ref. 080412 Page 4 of 5



(According to Regulation EC n° 1907/2006)

Revision: 4 / Revision Date: 01.06.2015

16. OTHER INFORMATION

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: 16.12.2012 Revision date: 01.06.2015 Revision Number: rev. 4

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Revision: 5 / Revision Date: 01.06.2015

ENGLISH

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

1.1 Product identifiers

Product name: Sulphanilic Acid Reagent Product Number: 080406-080418

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, zona industriale, 64026 - Roseto degli Abruzzi (TE)

Telephone number: 085/8930745 Fax number: 085/8930330

E-mail address: liofilchem@liofilchem.net **1.4 Emergency telephone number**

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

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. 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.

Consigli di prudenza

P210 Keep away from heat/sparks/open flames/hot surfaces. — 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

P363 Wash contaminated clothing before reuse.

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.

Descrizioni supplementari del rischio nessuno(a)

2.3 Other hazards - none

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	Acetic acid							
7681-11-0	200-580-7	607-002-00-6	-	30.0 %	Flam. Liq. 3; Skin Corr. 1A; H226, H314			
Sulfanilic acid	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 the full text of H codes and R phrases mentioned in this section, see section 16

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MSDS Ref. 080406-080418 Page 1 of 5



(According to Regulation EC n° 1907/2006)

Revision: 5 / Revision Date: 01.06.2015

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. Rinse skin with water/shower. 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. Immediately call a POISON CENTER or doctor/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

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

Carbon oxides.

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

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 Metodi e materiali per il contenimento e per la bonifica

Pick up and arrange disposal without creating dust. Sweep up and shovel. 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.

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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Acetic Acid: 64-19-7

TWA 10 ppm

25 mg/m³

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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.

No data available

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Odour

Form Liquid Color Colorless

Odour Threshold No data available No data available pН 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 solubilityNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableDecomposition temperatureNo data availableViscosityNo data availableExplosive propertiesNo data availableOxidizing propertiesNo data available

9.2 Other safety information

no data available

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. Extremes of temperature and direct sunlight.

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

No decomposition when used for the intended uses.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity: no data available

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation:

Acetic acid effects are: Eyes – Rabbit - Corrosive to eyes Sulfanilic acid effects are: Eyes – Rabbit - Eye irritation

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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 a

carcinogen by IARC or expected.

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

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 Other adverse effects

no data available

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.

14. INFORMAZIONI SUL TRASPORTO

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

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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.

16. OTHER INFORMATION

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

Skin Irrit. 2 Skin irritation (Category 2) Eye Irrit. 2 Eye irritation (Category 2)

Skin Sens. 1 Skin sensitisation (Category 1)

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

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: 16.12.2012 Revision date: 01.06.2015 Revision Number: rev. 5

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ENGLISH

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

1.1 Product identifiers

Product name: Alpha Naphthylamine Reagent

Product Number: 080410-080417

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, zona industriale, 64026 - Roseto degli Abruzzi (TE)

Telephone number: 085/8930745 Fax number: 085/8930330

E-mail address: liofilchem@liofilchem.net **1.4 Emergency telephone number**

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

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. 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.

Consigli di prudenza

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P243 Take precautionary measures against static discharge.

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

P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with

water/shower

P363 Wash contaminated clothing before reuse.

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.

Descrizioni supplementari del rischio nessuno(a)

2.3 Other hazards - none

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; STOT SE 3; Aquatic Chronic 2; H302, H311, H315, H318, H335, H411

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Additional Information:

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

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. Rinse skin with water/shower. 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. Immediately call a POISON CENTER or doctor/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

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

Carbon oxides.

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

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 Metodi e materiali per il contenimento e per la bonifica

Pick up and arrange disposal without creating dust. Sweep up and shovel. 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.

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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Acetic Acid: 64-19-7

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TWA

10 ppm 25 mg/m³

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Form Liquid Color Colourless

OdourNo data availableOdour ThresholdNo data availablepHNo data availableMelting point/ freezing pointNo 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 No data available Partition coefficient: n-octanol/water No data available **Autoignition temperature** No data available **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

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. Extremes of temperature and direct sunlight.

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

No decomposition when used for the intended uses.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity: 1-Naphthol effects are: LD50 Oral-Rat-1.870 mg/kg

LD50 Dermal -Rabbit-880 mg/kg

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Skin corrosion/irritation: 1-Naphthol effects are: Skin - rabbit - Severe skin irritation - 24 h

Serious eye damage/eye irritation:

Acetic acid effects are: Eyes – Rabbit - Corrosive to eyes 1-Naphthol effects are: Eyes - rabbit - Severe eye irritation

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 a

carcinogen by IARC or expected.

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: 1-Naphthol effects are: May cause respiratory irritation

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Additional information: RTECS: no data available

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 Other adverse effects

no data available

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.

14. INFORMAZIONI SUL TRASPORTO

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

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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.

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-phrase(s) mentioned in Section 3

Acute Tox. 4 Acute toxicity (Category 4) Acute Tox. 3 Acute toxicity (Category 3)

Eye Dam. 1 Serious eye damage (Category 1)

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.

H318 Causes serious eye damage.

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

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: 16.12.2012 Revision date: 01.06.2015 Revision Number: rev. 5

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ENGLISH

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

1.1 Product identifiers

Product name: Kovac's Reagent

Product Number: 080401-080413-080415

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, zona industriale, 64026 - Roseto degli Abruzzi (TE)

Telephone number: 085/8930745 Fax number: 085/8930330

E-mail address: liofilchem@liofilchem.net

1.4 Emergency telephone number

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

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/sparks/open flames/hot surfaces. — No smoking.Take precautionary

P243 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

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures





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Hazardous substances

CAS n°	EC n°	Index n°	Registration number REACH	Concentration	Classification according Regulation (EC) No 1272/2008			
Isobutyl alcoho	ol							
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, H335			

Additional Information:

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

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

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, Hydrogen chloride gas.

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

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 Metodi e materiali per il contenimento e per la bonifica

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.

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.





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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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Chloridric acid: 7647-01-0

IOELV (European Union) Short-term value: 15 mg/m³, 10 ppm

Long-term value: 8 mg/m³, 5 ppm

TWA 5 ppm 8 mg/m³ STEL 10 ppm 15 mg/m³

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Form Liquid Color Yellow

OdourNo data availableOdour ThresholdNo data availablepHNo data availableMelting point/ freezing pointNo 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 No data available Partition coefficient: n-octanol/water No data available No data available **Autoignition temperature 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

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.





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10.5 Incompatible materials

Strong oxidizing agents, acid chlorides, acid anhydrides, acid anhydrides, bases, amines, Alkali metals, permanganates, such as potassium permanganate, fluoride, metal acetylides.

10.6 Hazardous decomposition products

No decomposition when used for the intended uses.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity: no data available

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

Carcinogenicity: This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC,

ACGIH, NTP, or EPA classification. (Hydrochloric acid)

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Hydrochloric acid)

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

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 Other adverse effects

no data available

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.

14. INFORMAZIONI SUL TRASPORTO

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. (ISOBUTANOL, HYDROCHLORIC ACID) IMDG: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (ISOBUTANOL, HYDROCHLORIC ACID) IATA: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (ISOBUTANOL, HYDROCHLORIC ACID)

14.3 Transport hazard class(es)

ADR/RID: 3 (8) IMDG: 3 (8) IATA: 3 (8)



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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.

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-phrase(s) mentioned in Section 3

Met. Corr. 1 Corrosive to metals (Category 1)

Skin Irrit. 2 Skin irritation (Category 2)

H290 May be corrosive to metals.

H315 Causes skin irritation.

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: 19.09.2014 Revision date: 01.06.2015 Revision Number: rev. 5



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ENGLISH

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

1.1 Product identifiers

Product name: Alpha Naphtol Reagent Product Number: 080403-088035A

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, zona industriale, 64026 - Roseto degli Abruzzi (TE)

Telephone number: 085/8930745 Fax number: 085/8930330

E-mail address: liofilchem@liofilchem.net 1.4 Emergency telephone number

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

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

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 and R phrases mentioned in this section, see section 16

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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

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.

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 Metodi e materiali per il contenimento e per la bonifica

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.

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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit value.

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.

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Respiratory protection: It is advisable wear dust mask.

Environmental exposure control

For information relating to environmental precautions, see chapter 6.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Form Liquid Color Beige

OdourNo data availableOdour ThresholdNo data availablepHNo data availableMelting point/ freezing pointNo data available

Initial boiling point and boiling range > 35°C Flash point < 23°C

Evaporation rate

Flammability (solid, gas)

Upper / lower flammability or explosive limits

Vapour pressure

Vapour density

Relative density

No data available

Water solubility soluble

Partition coefficient: n-octanol/waterNo data availableAutoignition temperatureProduct not selfignitingDecomposition temperatureNo data availableViscosityNo data availableExplosive propertiesNo data availableOxidizing propertiesNo data available

9.2 Other safety information

no data available

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.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity: 1-Naphthol effects are: LD50 Oral-Rat-1.870 mg/kg

LD50 Dermal -Rabbit-880 mg/kg

Skin corrosion/irritation: 1-Naphthol effects are: Skin - rabbit - Severe skin irritation - 24 h **Serious eye damage/eye irritation**: 1-Naphthol effects are: Eyes - rabbit - Severe eye irritation

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

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Specific target organ toxicity - single exposure:

1-Naphthol effects are: May cause respiratory irritation

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Additional information: RTECS: no data available

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 Other adverse effects

no data available

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.

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

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

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This product has not been made a chemical safety assessment.

16. OTHER INFORMATION

Text of H code(s) and R-phrase(s) 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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