SAFETY DATA SHEET (According to Regulation EC n° 1907/2006)

Revision: 3 / Revision Date: 01.06.2015

ENGLISH

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

1.1 Product identifiers

Product name: Hippurate Test Product Number: 88007

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. 3, Flammable liquids (Category 3); H226 Acute Tox. 4, Acute toxicity,Oral (Category 4); H302 Acute Tox. 4, Acute toxicity, Dermal (Category 4); H312 Acute Tox. 4, Acute toxicity, Inhalation (Category 4); H332 Repr. 1B, Reproductive toxicity (Category 1B); H360FD

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

Pictogram



Signal word

H226Flammable liquid and vapour.H302 + H312 + H332Harmful if swallowed, in contact with skin or if inhaled.H360FDMay damage fertility. May damage the unborn child.	nazaru statement(s)	
······, ······························	H226	Flammable liquid and vapour.

Precautionary statement(s)

P201	Obtain special instructions before use.	
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.	
P308 + P313	IF exposed or concerned: Get medical advice/ attention.	
P312	Call a POISON CENTER or doctor/physician if you feel unwell.	
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

6. ACCIDENTAL RELEASE MEASURES

Refer to component MSDS

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SAFETY DATA SHEET (According to Regulation EC n° 1907/2006)

Revision: 3 / Revision Date: 01.06.2015

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid exposure - obtain special instructions before use. 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: - Refer to component MSDS	IMDG: -	IATA: -	
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(ADR/RID: - Refer to component MSDS	es) IMDG: -	IATA: -	
14.4 Packaging group ADR/RID: - Refer to component MSDS	IMDG: -	IATA: -	
14.5 Environmental hazards ADR/RID: - Refer to component MSDS	IMDG: -	IATA: -	
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			
Kit Components:			
\$88007	Hippurate Test discs	Not Dangerous	
080416	Ninhydrin 7% Reagent	Flam. Liq. 3, Flammable liquids (Category 3) Acute Tox. 4, Acute toxicity,Oral (Category 4) Acute Tox. 4, Acute toxicity, Dermal (Category 4) Acute Tox. 4, Acute toxicity, Inhalation (Category 4) Repr. 1B, Reproductive toxicity (Category 1B)	

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 <u>www.liofilchem.net</u>. for additional terms and conditions of sale.

Previous date: 07.04.2014 Revision date: 01.06.2015 Revision Number: rev. 3

Liofilchem[®] Non-Hazardous Product Statement

Code Number (REF):	\$88007
Description:	Hippurate Test discs
Date of revision:	Rev. 2 of 01.06.2015

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

The product must be used by qualified personnel.

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

Repetto Saverio Regulatory Affairs (signature on file) Liofilchem® 64026 Roseto degli Abruzzi, Italy Tel. +39 085 8930745 - Fax +39 085 8930330 www.liofilchem.net

SAFETY DATA SHEET (According to Regulation EC n° 1907/2006)

Revision: 3 / Revision Date: 01.06.2015

ENGLISH

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

1.1 Product identifiers

Product name: Ninhydrin 7% Reagent Product Number: 080405-080416

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 Acute Tox. 4, Acute toxicity,Oral (Category 4); H302 Acute Tox. 4, Acute toxicity, Dermal (Category 4); H312 Acute Tox. 4, Acute toxicity, Inhalation (Category 4); H332 Repr. 1B, Reproductive toxicity (Category 1B); H360FD

2.2 Label elements

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

Pictogram



Signal word Hazard statement(s)

nazaru statement(s)	
H226	Flammable liquid and vapour.
H302 + H312 + H332	Harmful if swallowed, in contact with skin or if inhaled.
H360FD	May damage fertility. May damage the unborn child.

Precautionary statement(s)

,	-1-2	
P201	Obtain special instructions before use.	
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.	
P308 + P313	IF exposed or concerned: Get medical advice/ attention.	
P312	Call a POISON CENTER or doctor/physician if you feel unwell.	
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
2 - Methoxyeth	anol				
109-86-4	203-713-7	603-011-00-4	01-2119494721- 33-XXXX	<= 100 %	Flam. Liq. 3; Acute Tox. 4; Repr. 1B; H226, H302 + H312 + H332, H360FD
Ninhydrin					
485-47-2	207-618-1	-	-	7.0%	Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H302, H315, H319, H335

Additional Information:

Liofilchem®

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. Consult a physician.

In case of eye contact: Rinse thoroughly 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

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 exposure - obtain special instructions before use. 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

2-Methoxyethanol: 109-86-4

TWA

1 ppm

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8.2 Exposure controls

Exposure controls

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

Eyes/Face Protection: It is advisable wear safety goggles

Skin protection: Handle with gloves

Body Protection: Use protective clothes in accordance with laboratory good practices. Respiratory protection: It is advisable wear dust mask.

Environmental exposure control

For information relating to environmental precautions, see chapter 6.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance Form Liquid Color Yellow Odour **Odour Threshold** pН Melting point/ freezing point Initial boiling point and boiling range Flash point **Evaporation rate** Flammability (solid, gas) Upper / lower flammability or explosive limits Vapour pressure Vapour density **Relative density** Water solubility Partition coefficient: n-octanol/water Autoignition temperature Decomposition temperature Viscosity **Explosive properties Oxidizing properties**

No data available No data available No data available No data available > 35°C > 23°C - < 60°C No data available Soluble No data available 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 Aluminum, Magnesium, Alkalis, 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: 300 mg/kg < STAmix (Oral) < 2000 mg/kg 1000 mg/kg < STAmix (Dermal) < 2000 mg/kg 10 mg/l < STAmix (Inal.) < 20 mg/l Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: Methoxyethanol effects are: Skin - rabbit - Mild eye irritation - 24 h

Respiratory or skin sensitization: no data available



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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:

Methoxyethanol effects are: May cause congenital malformation in the fetus. Presumed human reproductive toxicant. May cause reproductive disorders.

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 1188	IMDG: UN 1188	IATA: UN 1188
14.2 UN proper shipping name		

ADR/RID: ETHYLENE GLYCOL MONOMETHYL ETHER IMDG: ETHYLENE GLYCOL MONOMETHYL ETHER IATA: ETHYLENE GLYCOL MONOMETHYL ETHER **14.3 Transport hazard class(es)** ADR/RID: 3 IMDG: 3 IATA: 3 **14.4 Packaging group** ADR/RID: III IMDG: III IATA: III **14.5 Environmental hazards** ADR/RID: yes IMDG: yes 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

SAFETY DATA SHEET (According to Regulation EC n° 1907/2006)

Revision: 3 / Revision Date: 01.06.2015

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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)

STOT SE 3 Specific target organ toxicity-single exposure (Category 3)

H315 Causes skin irritation

H319 Causes serious eye irritation

H335 May cause respiratory 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

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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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Previous date: 03.12.2012 Revision date: 01.06.2015 Revision Number: rev. 3