ENGLISH

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

1.1 Product identifiers

Product name: Urea/Indole Test Product Number: 88024

1.2 Identified uses of the relevant substance or mixture and uses advised against Identified uses relevant: Professional uses, Health services, scientific research and development

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Liofilchem® Address: Via Scozia, 64026 - Roseto degli Abruzzi (TE) Telephone number: 085/8930745 Fax number: 085/8930330 E-mail address: liofilchem@liofilchem.com 1.4 Emergency telephone number +39 02-66101029 (Centro Antiveleni Niguarda Cà Granda - Milano).

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP] Flam. Liq. 3, Flammable liquids (Category 3); H226 Skin Corr. 1B, Skin corrosion (Category 1B); H314 Eye Dam. 1, Serious eye damage (Category 1); H318 STOT SE 3, Specific target organ toxicity - single exposure (Category 3); H335, H336 2.2 Label elements

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

Pictogram

Signal word



•	o
Hazard statement(s)	
H226	Flammable liquid and vapour.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
Precautionary statement(s)	
P210	Keep away from heat, hot surfaces, sparks, flames and other sources of ignition. No smoking.
P243	Take precautionary measures against static discharge.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician

Supplemental Hazard Statements none

2.3 Other hazards - none

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Refer to component MSDS

SECTION 4. FIRST AID MEASURES

Refer to component MSDS

SECTION 5. FIRE-FIGHTING MEASURES

Refer to component MSDS

SECTION 6. ACCIDENTAL RELEASE MEASURES

Refer to component MSDS

SECTION 7. HANDLING AND STORAGE

Refer to component MSDS

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Refer to component MSDS

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Refer to component MSDS

SECTION 10. STABILITY AND REACTIVITY

Refer to component MSDS

SECTION 11. TOXICOLOGICAL INFORMATION

Refer to component MSDS

SECTION 12. ECOLOGICAL INFORMATION

Refer to component MSDS

SECTION 13. DISPOSAL CONSIDERATIONS

Refer to component MSDS.

SECTION 14. TRANSPORT INFORMATION

Refer to component MSDS

SECTION 15. REGULATORY INFORMATION

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

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

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

15.2 Chemical Safety Assessment

This product has not been made a chemical safety assessment.

SECTION 16. OTHER INFORMATION

Kit Components 88024A	: Urea/Indole Test	Not Dangerous
080415 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);

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

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

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

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

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H290 May be corrosive to metals

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H315 Causes skin irritation

H318 Causes serious eye damage

- H335 May cause respiratory irritation
- H336 May cause drowsiness or dizziness

Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

CLP: Regulation concerning the classification, labelling and packaging of substances and mixtures, Regulation (EC) No. 1272/2008.

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

IATA: International Air Transport Association

IMDG: International Maritime Code for Dangerous Goods

CL50: Middle lethal concentration of individuals in essay

DL50: The median lethal dose that causes death in 50% of individuals in essay

PBT: Persistent, bioaccumulative and toxic substance

REACH: Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), Regulation (EC) No. 1907/2006

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail

vPvB: Very persistent and very bioaccumulative substance

Training advice

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

Further information

This sheet replaces any previous edition.

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

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

Previous date: 01.06.2015 Revision date: 17.04.2023 Revision Number: rev. 7

Liofilchem[®] Non-Hazardous Product Statement

Code Number (REF):	88024A
Description:	Urea/Indole Test
Date of revision:	Rev. 5 of 17.04.2023

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

The product must be used by qualified personnel.

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

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

ENGLISH

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

1.1 Product identifiers

Product name: Kovac's Reagent Product Number: 80271-87001-\$080401-\$080413-\$080415-\$080435

1.2 Identified uses of the relevant substance or mixture and uses advised against Identified uses relevant: Professional uses, Health services, scientific research and development

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Liofilchem® Address: Via Scozia, 64026 - Roseto degli Abruzzi (TE) Telephone number: 085/8930745 Fax number: 085/8930330 E-mail address: liofilchem@liofilchem.com 1.4 Emergency telephone number +39 02-66101029 (Centro Antiveleni Niguarda Cà Granda - Milano).

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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



Hazard statement(s)	
H226	Flammable liquid and vapour.
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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

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SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous substances

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

Additional Information:

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

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

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

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

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

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

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

4.2 Most important symptoms and effects, both acute and delayed

no data available

4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

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

5.2 Special hazards arising from the substance or mixture

Oxides of Carbon.

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

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

6.2 Environmental precautions

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

6.3 Methods and materials for containment and cleaning up

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

6.4 Reference to other sections

For information on safe handling, see Chapter 7.

For information on personal protection equipment see Chapter 8.

For disposal information see Chapter 13.

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SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

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

7.2 Conditions for safe storage, including any incompatibilities

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

7.3 Specific end uses

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

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Isobutyl alcohol

	Derive	ed No Ef	fect Level (DNEL)	
Application Area			Health effect	Value
Worker DNEL, longterm	inhalation	Long-term local effects		310 mg/m3
Consumer DNEL, longterm	Oral	Long-term systemic effects		
Consumer DNEL, longterm	inhalation	Long-term local effects		mg/m3
	Predicted N	No Effect	Concentration (PNEC)	
Fresh water			0,4 mg/l	
Sea water			0,04 mg/l	
Aquatic intermittent release			11 mg/l	
Fresh water sediment			1,52 mg/kg	
Sea sediment			0,152 mg/kg	
Soil			0,07 mg/kg	
Sewage treatment plant			10 mg/l	
Chloridric acid 37 %			-	~
IOLEV (UE) Sh			Short-term value: 15 mg/m3	8, 10 ppm

Long-term value: 8 mg/m3, 5 ppm

8.2 Exposure controls

Exposure controls

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

Eyes/Face Protection: It is advisable wear safety goggles

Skin protection: Handle with gloves

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

Environmental exposure control

For information relating to environmental precautions, see chapter 6.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties Appearance Form Liquid Color Yellow Odour No data available **Odour Threshold** No data available No data available рΗ Melting point/ freezing point No data available Initial boiling point and boiling range > 35°C > 23°C - < 60°C Flash point **Evaporation rate** No data available Flammability (solid, gas) No data available

SAFETY DATA SHEET (According to Regulation EC n° 1907/2006 and Regulation (UE) 878/2020) Revision: 8 / Revision Date: 17.04.2023

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**

9.2 Other safety information

no data available

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity no data available

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions no data available

10.4 Conditions to avoid Heat, flames and sparks.

10.5 Incompatible materials

Alkali metals, Oxidizing agents, Peroxides.

10.6 Hazardous decomposition products No decomposition when used for the intended uses.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

- Isobutyl alcohol (CAS NO. 78-83-1) Acute toxicity LD50 Oral - Rat - female - 3.350 mg/kg LC50 Inhalation - Rat - male and female - 4 h - 24,6 mg/l - vapor LD50 Dermal - Rabbit - female - 2.460 mg/kg Skin corrosion/irritation Skin - Rabbit Result: Irritating to skin. - 24 h Serious eye damage/eye irritation Eyes - Rabbit Result: Corrosive - 24 h Respiratory or skin sensitization No data available Germ cell mutagenicity : negative Carcinogenicity No data available Reproductive toxicity No data available Specific target organ toxicity - May cause respiratory irritation. - Respiratory Tract May cause drowsiness or dizziness. - Central nervous system Specific target organ toxicity - repeated exposure No data available Aspiration hazard No data available
- Chloridric acid 37% (CAS NO. 7647-01 -0) Acute toxicity No data available Skin corrosion/irritation Causes severe skin burns and eye damage. Serious eye damage/eye irritation Strong caustic effect. Strong irritant with the danger of severe eye injury. Causes serious eye damage. Inhalation: Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. Harmful if inhaled. May cause respiratory tract irritation.

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No data available No data available No data available No data available soluble No data available Product not selfigniting No data available No data available No data available No data available



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

Additional information: RTECS: no data available

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

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

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

This mixture contains no substances evaluated PBT or vPvB

12.6 Endocrine disrupting properties

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

12.7 Other adverse effects

no data available

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

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

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

Contaminated packaging

Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION					
14.1 UN number ADR/RID: UN 2924	IMDG: UN 2924	IATA: UN 2924			
14.2 UN proper shipping name ADR/RID: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (Isobutyl alcohol - Chloridric acid) IMDG: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (Isobutyl alcohol - Chloridric acid) IATA: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (Isobutyl alcohol - Chloridric acid)					
14.3 Transport hazard class(es ADR/RID: 3 (8) 14.4 Packaging group) IMDG: 3 (8)	IATA: 3 (8)			
ADR/RID: III	IMDG: III	IATA: III			
14.5 Environmental hazards ADR/RID: no	IMDG: no	IATA: no			
14.6 Special precautions for user no data available					
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code					

no data available

SECTION 15. REGULATORY INFORMATION

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15.2 Chemical Safety Assessment

This product has not been made a chemical safety assessment.

SECTION 16. OTHER INFORMATION

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

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

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

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

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

H226 Flammable liquid and vapour

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Previous date: 01.06.2015 Revision date: 17.04.2023 Revision Number: rev. 4