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

Revision: 1 / Revision Date: 01.06.2015

ENGLISH

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

1.1 Product identifiers

Product name: GRAM COLOR KIT Product Number: 87101

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

Eye Irrit. 2, Eye irritation (Category 2); H319

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

Muta. 2, Germ cell mutagenicity (Category 2); H341

Carc. 1B, Carcinogenicity (Category 1B); H350

STOT RE 2, Specific target organ toxicity - repeated exposure , Oral (Category 2); H373

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



S	Igi	nai	W	or	a		

Hazard statement	S)
H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H373	May cause damage to organs (thyroid) through prolonged or repeated exposure if swallowed.
H412	Harmful to aquatic life with long lasting effects.

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/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.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P314	Get medical advice/attention if you feel unwell.
P308 + P313 P273	IF exposed or concerned: Get medical advice/attention. Avoid release to the environment.

Supplemental Hazard Statements none

2.3 Other hazards - none

3. COMPOSITION / INFORMATION ON INGREDIENTS

Refer to component MSDS

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

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4. FIRST AID MEASURES

Refer to component MSDS

5. FIRE-FIGHTING MEASURES

Refer to component MSDS

6. ACCIDENTAL RELEASE MEASURES

Refer to component MSDS

7. HANDLING AND STORAGE

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. INFORMAZIONI SUL TRA	SPONIO	
14.1 UN number ADR/RID: - Refer to component MSDS	IMDG: -	IATA: -
14.2 UN proper shipping na ADR/RID: Refer to component IMDG: Refer to component M IATA: Refer to component M	nt MSDS ISDS	
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



Revision: 1 / Revision Date: 01.06.2015

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

Kit Componer	nts:	
87101A Bottle 1	Crystal Violet Solution	Flam. Liq. 2, Flammable liquids (Category 2) Eye Irrit. 2, Eye irritation (Category 2) Muta. 2, Germ cell mutagenicity (Category 2) Carc. 1B, Carcinogenicity (Category 1B) Aquatic Chronic 3, Chronic toxicity to the aquatic environment (Category 3)
87101B Bottle 2	Lugol PVP Solution	STOT RE 2, Specific target organ toxicity - repeated exposure , Oral (Category 2); H373
87101C Bottle 3	Decolourizing Solution	Flam. Liq. 2, Flammable liquids (Category 2) Eye Irrit. 2, Eye irritation (Category 2) STOT SE 3, Specific target organ toxicity - Single exposure (Category 3)
87101D Bottle 4	Safranine Solution	Flam. Liq. 3, Flammable liquids (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. 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: 19.08.2013 Revision date: 01.06.2015 Revision Number: rev. 1

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

Revision: 1 / Revision Date: 01.06.2015

ENGLISH

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

1.1 Product identifiers

Product name: Crystal Violet Solution Product Number: 87101A (Bottle 1)

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 Irrit. 2, Eye irritation (Category 2); H319

Muta. 2, Germ cell mutagenicity (Category 2); H341

Carc. 1B, Carcinogenicity (Category 1B); H350

Aquatic Chronic 3, Chronic toxicity to the aquatic environment (Category 3); H412

2.2 Label elements

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

Danger





Signal	word	
--------	------	--

Hazard statement(s)

H225 H319	Highly flammable liquid and vapour. Causes skin irritation.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H412	Harmful to aquatic life with long lasting effects.

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/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.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P308 + P313	IF exposed or concerned: Get medical advice/attention.
P273	Avoid release to the environment.
Supplemental Hazard	Statements none

2.3 Other hazards - none

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures



Revision: 1 / Revision Date: 01.06.2015

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	-	20.0%	Flam. Liq. 2; H225
Crystal violet					
548-62-9	208-953-6	612-204-00-2	-	2.0%	Acute Tox. 4; Eye Dam. 1; Muta. 2; Carc. 1B; Aquatic Acute 1; Aquatic Chronic 1; Aquatic Acute 1; H302, H318, H341, H350, H400, H410

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 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. If eye irritation persists: Get medical advice/attention.

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, nitrogen oxides (NOx).

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. Remove all sources of ignition.

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 - Not smoking. Take preventive measures to avoid 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

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. **Environmental exposure control**

No data available

No data available No data available

No data available

No data available

No data available

No data available

No data available

No data available

No data available

No data available

No data available

No data available

No data available

No data available

Product not selfigniting

Product is not explosive

> 35°C

< 23°C

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 Dark violet 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**

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

Strong acids, Strong bases, Strong oxidizing agents.

10.6 Hazardous decomposition products

No decomposition when used for the intended uses.

Revision: 1 / Revision Date: 01.06.2015

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

Aspiration hazard: no data available

Additional information: RTECS: no data available

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 8,9 mg/l - 96,0 h Toxicity to daphnia and other aquatic invertebrates EC50 – Daphnia - 26 mg/l - 48 h

12.2 Persistence and degradability

Biotic/Aerobic Biochemical oxygen demand - Exposure time 28 d Result: 36 % - Not readily biodegradable. Method: Closed Bottle test

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) IMDG: 3 ADR/RID: 3 IATA: 3 14.4 Packaging group ADR/RID: II IMDG: II IATA: II

14.5 Environmental hazardsADR/RID: noIMDG: no

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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

Acute Tox. 4 Acute toxicity (Category 4)

Eye Dam. 1 Serious eye damage (Category 1)

Aquatic Acute 1 Acute aquatic toxicity (Category 1)

Aquatic Chronic 1 Chronic aquatic toxicity (Category 1)

H302 Harmful if swallowed

H318 Causes serious eye damage

H400 Very toxic to aquatic life.

H410 Very 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.

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: 19.08.2013 Revision date: 01.06.2015 Revision Number: rev. 1

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

Revision: 1 / Revision Date: 01.06.2015

ENGLISH

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

1.1 Product identifiers

Product name: Lugol PVP Solution Product Number: 87101B (Bottle 2)

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] STOT RE 2, Specific target organ toxicity - repeated exposure , Oral (Category 2); H373

2.2 Label elements

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

Pictogram



Warning

Signal word

Hazard statement(s)

H373

May cause damage to organs (thyroid) through prolonged or repeated exposure if swallowed

Precautionary statement(s)

P314 Get medical advice/attention 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
Potassium iod	ide				
7681-11-0	231-659-4	-	-	2.0 %	Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; H302, H315, H319
lodine					
7553-56-2	231-442-4	053-001-00-3	01- 2119485285- 30-XXXX	1.3 %	Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; STOT RE 1; Aquatic Acute 1 ; H312 + H332, H315, H319, H335, H372, H400

Additional Information:

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

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

Revision: 1 / 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: Wash off with soap and plenty of water. Consult a physician.

In case of eye contact: 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

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 vapors, mist or gas. Ensure adequate ventilation. Do not inhale dust.

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 eyes and skin. Avoid breathing vapors or mists. 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. **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 Dark brown 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 soluble No data available Product not selfigniting No data available No data available Product is not explosive 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

no data available

10.6 Hazardous decomposition products

No decomposition when used for the intended uses.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity:

Iodine effects are: LD50 Oral - rat - 14.000 mg/kg LC50 Inal. - rat - 4 h - > 4,588 mg/l LC50 Dermal – rat - 1.425 mg/kg Potassium Iodide effects are: LD50 Oral – mouse - 1.000 mg/kg **Skin corrosion/irritation:** Iodine effects are: Skin - Low skin irritation Potassium Iodide effects are: Skin – rabbit - Irritating to skin

Serious eye damage/eye irritation:

Iodine effects are: Eyes - Low eye irritation Potassium Iodide effects are: Eyes - rabbit - Irritating to skin Skin

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

Revision: 1 / Revision Date: 01.06.2015

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: lodine effects are: Inhalation- May cause respiratory irritation

Specific target organ toxicity - repeated exposure: lodine effects are: Oral - May cause damage to organs through prolonged or repeated exposure - thyroid

Aspiration hazard: no data available

Additional information: RTECS: no data available

12. ECOLOGICAL INFORMATION

12.1 Toxicity

lodine effects are:

Toxicity to fish LC50 - Danio rerio (zebrafish) – 1.67 mg/l - 96.0 h Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) – 8.55 mg/l -48 h Toxicity to algae Growth inhibition EC50 - Desmodesmus subspicatus (green algae) - 0,13 mg – 72 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: -	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: -	i) 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

Revision: 1 / Revision Date: 01.06.2015

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)

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)

STOT RE 1 Specific target organ toxicity - repeated exposure, Oral (Category 1)

Aquatic Acute 1 Acute toxicity to the aquatic environment (Category 1)

H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H372 Causes damage thyroid through prolonged or repeated exposure if swallowed

H400 Very toxic to aquatic life.

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: 19.08.2013 Revision date: 01.06.2015 Revision Number: rev. 1

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

Revision: 1 / Revision Date: 01.06.2015

ENGLISH

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

1.1 Product identifiers

Product name: Decolourizing Solution Product Number: 87101C (Bottle 3)

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 Irrit. 2, Eye irritation (Category 2); H319

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

2.2 Label elements

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

Pictogram



Signal word

Hazard statement(s)	
H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Danger

Precautionary statement(s)

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.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/attention.

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	-	50.0 %	Flam. Liq. 2; H225
Acetone		•	L	L	
67-64-1	200-662-2	606-001-00-8	01-2119471330- 49	50.0 %	Flam. Liq. 2; Eye Irrit. 2 STOT SE 3; H225, H319 H336

Additional Information:

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

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

Revision: 1 / 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: 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. If eye irritation persists: Get medical advice/attention.

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.

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 Colorless Odour No data available **Odour Threshold** No data available No data available pН Melting point/ freezing point No data available > 35°C Initial boiling point and boiling range Flash point < 23°C **Evaporation rate** No data available Flammability (solid, gas) No data available Upper / lower flammability or explosive limits No data available No data available Vapour pressure No data available Vapour density **Relative density** No data available Water solubility soluble Partition coefficient: n-octanol/water No data available Autoignition temperature Product not selfigniting **Decomposition temperature** No data available No data available Viscosity **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: 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

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 TRASP	ORTO	
14.1 UN number ADR/RID: UN 1090	IMDG: UN 1090	IATA: UN 1090
14.2 UN proper shipping name ADR/RID: ACETONE SOLUTION IMDG: ACETONE SOLUTION IATA: ACETONE SOLUTION	N	
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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SAFETY DATA SHEET (According to Regulation EC n° 1907/2006)

Revision: 1 / 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: 19.08.2013 Revision date: 01.06.2015 Revision Number: rev. 1

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

Revision: 1 / Revision Date: 01.06.2015

ENGLISH

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

1.1 Product identifiers

Product name: Safranin Solution Product Number: 87101D (Bottle 4)

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

2.2 Label elements

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

Pictogram



Signal word Warning

Hazard statement(s)

H226

Flammable liquid and vapour.

Precautionary statement(s)

P210 P243 Tenere lontano da fonti di calore, superfici riscaldate, scintille, fiamme e altre fonti di innesco. Vietato fumare.

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	accor (EC)	ding No
Ethyl alcol							
64-17-5	200-578-6	603-002-00-5	-	10.0 %	Flam. Liq. 2; H	225	

Additional Information:

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

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

Revision: 1 / 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: 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.

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 Liquid Form Color Red 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 Viscositv **Explosive properties Oxidizing properties**

No data available No data available No data available No data available > 35°C < 23°C No data available soluble No data available Product not selfigniting No data available No data available 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

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 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

Revision: 1 / 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 TRA	SPORTO		
14.1 UN number ADR/RID: UN 1170	IMDG: UN 1170	IATA: UN 1170	
14.2 UN proper shipping na ADR/RID: ETHANOL SOLUT IMDG: ETHANOL SOLUTION IATA: ETHANOL SOLUTION 14.3 Transport hazard class	TION (ETHYL ALCOHO N (ETHYL ALCOHOL S I (ETHYL ALCOHOL S(OLUTION)	
ADR/RID: 3	IMDG: 3	IATA: 3	
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	r 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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Revision: 1 / Revision Date: 01.06.2015

16. OTHER INFORMATION

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

Flam. Liq. 2 Flammable liquids (Category 2) H225 Flammable liquid and vapour

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: 19.08.2013 Revision date: 01.06.2015 Revision Number: rev. 1