

## ENGLISH

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

#### 1.1 Product identifiers

Product name: Muller Kauffmann Supplement  
Product Number: 87007

#### 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 Antiveneni Niguarda Cà Granda - Milano).

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

### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

##### Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Flam. Liq. 2, Flammable liquids (Category 2); H225  
Met. Corr. 1, Corrosive to metals (Category 1); H290  
Acute Tox. 4, Acute toxicity, Oral (Category 4); H302  
Skin Corr. 1A, Skin corrosion (Category 1A); H314  
Eye Dam. 1, Serious eye damage (Category 1); H318  
Aquatic Chronic 3 Chronic toxicity to the aquatic environment (Category 3); H412

#### 2.2 Label elements

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

##### Pictogram



##### Signal word

Danger

##### Hazard statement(s)

H225 Highly flammable liquid and vapour.  
H290 May be corrosive to metals.  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H318 Causes serious eye damage.  
H412 Harmful to aquatic life with long lasting effects.

##### Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.  
P243 Take precautionary measures against static discharge.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER or doctor/physician.

##### Supplemental Hazard Statements none

#### 2.3 Other hazards - none

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Refer to component MSDS

### 4. FIRST AID MEASURES

Refer to component MSDS

## 5. FIRE-FIGHTING MEASURES

Refer to component MSDS

## 6. ACCIDENTAL RELEASE MEASURES

Refer to component MSDS

## 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

Refer to component MSDS

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Refer to component MSDS

## 10. STABILITY AND REACTIVITY

Refer to component MSDS

## 11. TOXICOLOGICAL INFORMATION

Refer to component MSDS

## 12. ECOLOGICAL INFORMATION

Refer to component MSDS

## 13. DISPOSAL CONSIDERATIONS

Refer to component MSDS

## 14. INFORMAZIONI SUL TRASPORTO

### 14.1 UN number

ADR/RID: -                      IMDG: -                      IATA: -

### 14.2 UN proper shipping name

ADR/RID: Not dangerous goods  
IMDG: Not dangerous goods  
IATA: Not dangerous goods

### 14.3 Transport hazard class(es)

ADR/RID: -                      IMDG: -                      IATA: -

### 14.4 Packaging group

ADR/RID: -                      IMDG: -                      IATA: -

### 14.5 Environmental hazards

ADR/RID: no                      IMDG: no                      IATA: no

### 14.6 Special precautions for user

no data available

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

## 15. REGULATORY INFORMATION

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

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

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

## 15.2 Chemical Safety Assessment

This product has not been made a chemical safety assessment.

## 16. OTHER INFORMATION

### Kit Components:

80047A	Iodine solution	Flam. Liq. 2, Flammable liquids (Category 2) Met. Corr. 1, Corrosive to metals (Category 1) Acute Tox. 4, Acute toxicity, Oral (Category 4) Skin Corr. 1A, Skin corrosion (Category 1A) Eye Dam. 1, Serious eye damage (Category 1) Aquatic Chronic 3 Chronic toxicity to the aquatic environment (Category 3)
80047B	Brilliant green 0.1%	Not dangerous

### Abbreviations and acronyms

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

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

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

IATA: International Air Transport Association

IMDG: International Maritime Code for Dangerous Goods

CL50: Middle lethal concentration of individuals in essay

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

PBT: Persistent, bioaccumulative and toxic substance

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

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

vPvB: Very persistent and very bioaccumulative substance

### Training advice

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

### Further information

This sheet replaces any previous edition.

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

Liofilchem® shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.liofilchem.net](http://www.liofilchem.net) for additional terms and conditions of sale.

Previous date: 03.05.2012

Revision date: 01.06.2015

Revision Number: rev. 3

## ENGLISH

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

#### 1.1 Product identifiers

Product name: Iodine solution

Product Number: 80047A, 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 Antiveneni 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]

Acute Tox. 4, Acute toxicity, Oral (Category 4); H302

Skin Irrit. 2, Skin irritation (Category 2); H315

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

STOT RE 1, Specific target organ toxicity - repeated exposure, Oral (Category 1), H372

Aquatic Chronic 2, Chronic toxicity to the aquatic environment (Category 2); H411

#### 2.2 Label elements

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

##### Pictogram



##### Signal word

Danger

##### Hazard statement(s)

H302

Harmful if swallowed.

H315

Causes skin irritation.

H319

Causes serious eye irritation.

H372

Causes damage thyroid through prolonged or repeated exposure if swallowed.

H411

Toxic to aquatic life with long lasting effects.

##### Precautionary statement(s)

P273

Avoid release to the environment.

P280

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

P302 + P352

IF ON SKIN: Wash with plenty of soap and water.

P362

Take off contaminated clothing and wash before reuse.

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313

If eye irritation persists: Get medical advice/attention.

P314

Get medical advice/attention if you feel unwell.

P391

Collect spillage.

##### 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
<b>Potassium iodide</b>					
7681-11-0	231-659-4	-	-	25.0 %	Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; H302, H315, H319
<b>Iodine</b>					
7553-56-2	231-442-4	053-001-00-3	01-2119485285-30-XXXX	20.0 %	Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; STOT RE 1; Aquatic Acute 1 ; H312 + H332, H400, 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

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

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

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

**In case of skin contact:** Wash off with soap and plenty of water.

**In case of eye contact:** 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:** 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	Yellow

#### Odour

No data available

#### Odour Threshold

No data available

#### pH

No data available

#### Melting point/ freezing point

No data available

#### Initial boiling point and boiling range

No data available

#### Flash point

No data available

#### Evaporation rate

No data available

#### Flammability (solid, gas)

No data available

#### Upper / lower flammability or explosive limits

No data available

#### Vapour pressure

No data available

#### Vapour density

No data available

#### Relative density

No data available

#### Water solubility

soluble

#### Partition coefficient: n-octanol/water

No data available

#### Autoignition temperature

Product not selfigniting

#### Decomposition temperature

No data available

#### Viscosity

No data available

#### Explosive properties

Product is not explosive

#### Oxidizing properties

No data available

### 9.2 Other safety information

no data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

Stable under recommended storage conditions

### 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

Exposure to direct solar light.

### 10.5 Incompatible materials

Strong reducing agents, Strong acids, Ammonia, Steel, Brass, Alkali metals, Nickel, Magnesium, Aluminum, Zinc, Copper, Tin/tin oxides, and its alloys.

## 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

**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

**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:** Iodine effects are: Inhalation- May cause respiratory irritation

**Specific target organ toxicity - repeated exposure:** Iodine 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

Iodine 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: -                      IMDG: -                      IATA: -

#### 14.4 Packaging group

ADR/RID: -                      IMDG: -                      IATA: -

#### 14.5 Environmental hazards

ADR/RID: no                      IMDG: no                      IATA: no

#### 14.6 Special precautions for user

no data available

#### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

### 15. REGULATORY INFORMATION

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

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

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

#### 15.2 Chemical Safety Assessment

This product has not been made a chemical safety assessment.

### 16. OTHER INFORMATION

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

Acute Tox. 4 Acute toxicity (Category 4)  
STOT SE 3 Specific target organ toxicity - single exposure (Category 3)  
Aquatic Acute 1 Acute toxicity to the aquatic environment (Category 1)  
H312+H332 Harmful in contact with skin or if inhaled.  
H335 May cause respiratory irritation.  
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 [www.liofilchem.net](http://www.liofilchem.net) for additional terms and conditions of sale.

Previous date: 03.05.2012  
Revision date: 01.06.2015  
Revision Number: rev. 4



## ENGLISH

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

#### 1.1 Product identifiers

Product name: Brilliant green 0.1%  
Product Number: 80047B, 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

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

#### 2.2 Label elements

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

#### 2.3 Other hazards - none

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

#### 3.2 Mixtures

##### Hazardous substances

According to the applicable law is not necessary to declare any component

##### Additional Information:

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

### 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

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

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

**In case of skin contact:** Wash off with soap and plenty of water.

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

**If swallowed:** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### 4.2 Most important symptoms and effects, both acute and delayed

no data available

#### 4.3 Indication of any immediate medical attention and special treatment needed

no data available

### 5. FIRE-FIGHTING MEASURES

#### 5.1 Extinguishing media

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

#### 5.2 Special hazards arising from the substance or mixture

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. Ensure adequate ventilation.

## 6.2 Environmental precautions

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

## 6.3 Metodi e materiali per il contenimento e per la bonifica

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

## 6.4 Reference to other sections

For information on safe handling, see Chapter 7.

For information on personal protection equipment see Chapter 8.

For disposal information see Chapter 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

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	Light green

#### Odour

No data available

#### Odour Threshold

No data available

#### pH

No data available

#### Melting point/ freezing point

No data available

#### Initial boiling point and boiling range

No data available

#### Flash point

No data available

#### Evaporation rate

No data available

#### Flammability (solid, gas)

Not applicable

#### Upper / lower flammability or explosive limits

Not applicable

#### Vapour pressure

No data available

#### Vapour density

No data available

#### Relative density

No data available

#### Water solubility

soluble

#### Partition coefficient: n-octanol/water

No data available

#### Autoignition temperature

Product not selfigniting

#### Decomposition temperature

No data available

#### Viscosity

No data available

#### Explosive properties

Product is not explosive

#### Oxidizing properties

No data available

### 9.2 Other safety information

no data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

Stable under recommended storage conditions

### 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

Exposure to direct solar light.

### 10.5 Incompatible materials

Strong oxidizing agents.

### 10.6 Hazardous decomposition products

No decomposition when used for the intended uses.

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

**Acute toxicity:** no data available

**Skin corrosion/irritation:** no data available

**Serious eye damage/eye irritation:** no data available

**Respiratory or skin sensitization:** no data available

**Germ cell mutagenicity:** no data available

**Carcinogenicity:** IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen by IARC or expected.

**Reproductive toxicity:** no data available

**Specific target organ toxicity - single exposure:** no data available

**Specific target organ toxicity - repeated exposure:** no data available

**Aspiration hazard:** no data available

**Additional information:** RTECS: no data available

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

no data available

### 12.2 Persistence and degradability

no data available

### 12.3 Bioaccumulative potential

no data available

### 12.4 Mobility in soil

no data available

### 12.5 Results of PBT and vPvB assessment

This mixture contains no substances evaluated PBT or vPvB

### 12.6 Other adverse effects

no data available

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

#### Product

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

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

#### Contaminated packaging

Dispose of as unused product.

## 14. INFORMAZIONI SUL TRASPORTO

### 14.1 UN number

ADR/RID: - IMDG: - IATA: -

### 14.2 UN proper shipping name

ADR/RID: Not dangerous goods  
IMDG: Not dangerous goods  
IATA: Not dangerous goods

### 14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

### 14.4 Packaging group

ADR/RID: - IMDG: - IATA: -

### 14.5 Environmental hazards

ADR/RID: no IMDG: no IATA: no

### 14.6 Special precautions for user

no data available

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

## 15. REGULATORY INFORMATION

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

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

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

### 15.2 Chemical Safety Assessment

This product has not been made a chemical safety assessment.

## 16. OTHER INFORMATION

### Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road  
CLP: Regulation concerning the classification, labelling and packaging of substances and mixtures, Regulation (EC) No. 1272/2008.  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
IATA: International Air Transport Association  
IMDG: International Maritime Code for Dangerous Goods  
CL50: Middle lethal concentration of individuals in essay  
DL50: The median lethal dose that causes death in 50% of individuals in essay  
PBT: Persistent, bioaccumulative and toxic substance  
REACH: Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), Regulation (EC) No. 1907/2006  
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail  
vPvB: Very persistent and very bioaccumulative substance

### Training advice

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

### Further information

This sheet replaces any previous edition.

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

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