	MATERIAL SAFETY DATA SHEET Conforms to Reg. (EU) 830/2015					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. N°	Edited by	Approved by	Filed by	Page
96/18	17.12.2018	0	RLAB	DG	RLAB	1 di 11

SECTION 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Code: **F_90 - 036_090**
 Product name: **PIATTI Limone & Aloe Vera PRIM**

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified Uses	Industrial	Professional	Consumer
dishwashing detergent	-	✓	✓

Uses Advised Against

Do not use for uses other than those indicated

1.3. Details of the supplier of the safety data sheet

Name: **NEW FADOR S.r.l.**
 Full address: **Via M. Calderara 31**
 District and Country: **25018 Montichiari (BS)**
Tel. +39 030 961243
Fax +39 030 962500

e-mail address of the competent person responsible for the Safety Data Sheet

info@newfador.it

1.4. Emergency telephone number

For urgent inquiries refer to **tel. +39 030 961243 (office hours)**

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Eye irritation, category 2 H319 Causes serious eye irritation.

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words: **Warning**


Hazard statements:

H319 Causes serious eye irritation.

Precautionary statements:

P102 Keep out of reach of children.
P101 If medical advice is needed, have product container or label at hand.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P280 Wear eye protection / face protection.
P337+P313 If eye irritation persists: Get medical advice / attention.
P264 Wash hands thoroughly after handling.

Ingredients according to Regulation (EC) No. 648/2004

	MATERIAL SAFETY DATA SHEET Conforms to Reg. (EU) 830/2015					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. N°	Edited by	Approved by	Filed by	Page
96/18	17.12.2018	0	RLAB	DG	RLAB	2 di 11

Less than 5% anionic surfactants, amphoteric surfactants

perfumes

Preservation agents: 2-BROMO-2-NITROPROPANE-1,3-DIOL, GLUTARAL, BENZISOTHIAZOLINONE

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
BENZENESULFONIC ACID, C10-13-ALKYL DERIVS., SODIUM SALTS CAS 68411-30-3 EC 270-115-0 INDEX - Reg. no. 01-2119489428-22	$2,5 \leq x < 3$	Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, Aquatic Chronic 3 H412
ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS CAS 68891-38-3 EC 500-234-8 INDEX - Reg. no. 01-2119488639-16	$1 \leq x < 1,5$	Eye Dam. 1 H318, Skin Irrit. 2 H315, Aquatic Chronic 3 H412
2-BROMO-2-NITROPROPAN-1,3-DIOL CAS 52-51-7 EC 200-143-0 INDEX 603-085-00-8 Reg. no. 01-2119980938-15	$0 \leq x < 0,05$	Acute Tox. 4 H302, Acute Tox. 4 H312, Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, Aquatic Acute 1 H400 M=10, Aquatic Chronic 2 H411

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Wash contaminated clothing before using it again.


INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.

INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.

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

	MATERIAL SAFETY DATA SHEET Conforms to Reg. (EU) 830/2015					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. N°	Edited by	Approved by	Filed by	Page
96/18	17.12.2018	0	RLAB	DG	RLAB	3 di 11

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal firefighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 830/2015

Board Code S-P4/2-2

Board Date 05/2010

Board Rev. 1

Document n°	Revision date	Rev. N°	Edited by	Approved by	Filed by	Page
96/18	17.12.2018	0	RLAB	DG	RLAB	4 di 11

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

BENZENESULFONIC ACID, C10-13-ALKYL DERIVS., SODIUM SALTS

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,268	mg/l
Normal value in marine water	0,027	mg/l
Normal value for fresh water sediment	8,1	mg/kg
Normal value for marine water sediment	6,8	mg/kg
Normal value for water, intermittent release	0,017	mg/l
Normal value of STP microorganisms	3,43	mg/l
Normal value for the terrestrial compartment	35	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,425 mg/kg bw/d				
Inhalation			1,5	1,5 mg/m ³			6	6 mg/m ³
Skin				42,5 mg/kg bw/d				85 mg/kg bw/d

ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,24	mg/l
Normal value in marine water	0,024	mg/l
Normal value for fresh water sediment	0,917	mg/kg
Normal value for marine water sediment	0,092	mg/kg
Normal value for water, intermittent release	0,071	mg/l
Normal value of STP microorganisms	10	g/l
Normal value for the terrestrial compartment	7,5	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				15 mg/kg bw/d				
Inhalation				52 mg/m ³				175 mg/m ³
Skin				1650 mg/kg bw/d				2750 mg/kg bw/d


2-BROMO-2-NITROPROPAN-1,3-DIOL

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,01	mg/l
Normal value in marine water	0,001	mg/l
Normal value for fresh water sediment	0,041	mg/kg
Normal value for marine water sediment	0,003	mg/kg
Normal value for water, intermittent release	0,003	mg/l
Normal value of STP microorganisms	0,43	mg/l
Normal value for the terrestrial compartment	0,5	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		1,1 mg/kg bw/d		0,35 mg/kg bw/d				
Inhalation	1,3 mg/m ³	3,7 mg/m ³	1,3 mg/m ³	1,2 mg/m ³	4,2 mg/m ³	12,3 mg/m ³	4,2 mg/m ³	4,1 mg/m ³
Skin	0,008 mg/cm ²	4,2 mg/kg bw/d	0,008 mg/cm ²	1,4 mg/kg	0,013 mg/cm ²	7 mg/kg bw/d	0,013 mg/cm ²	2,3 mg/kg

	<h1 style="text-align: center;">MATERIAL SAFETY DATA SHEET</h1> <p style="text-align: center;">Conforms to Reg. (EU) 830/2015</p>					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. N°	Edited by	Approved by	Filed by	Page
96/18	17.12.2018	0	RLAB	DG	RLAB	5 di 11

bw/d

bw/d

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type B filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.


ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	liquid
Colour	light green
Odour	characteristic
Odour threshold	Not available
pH	5,5
Melting point / freezing point	Not available
Initial boiling point	Not available
Boiling range	Not available
Flash point	Not available
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Lower flammability limit	Not available
Upper flammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not available
Vapour density	Not available
Relative density	1,01 g/ml
Solubility	Not available
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	300 mPa*Sec
Explosive properties	not classified as explosive, contains no explosive substances according to CLP Art. (14 (2))
Oxidising properties	the product is not an oxidizing substance

	MATERIAL SAFETY DATA SHEET Conforms to Reg. (EU) 830/2015					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. N°	Edited by	Approved by	Filed by	Page
96/18	17.12.2018	0	RLAB	DG	RLAB	6 di 11

9.2. Other information

Information not available

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

2-BROMO-2-NITROPROPAN-1,3-DIOL

Decomposes on contact with: water, metals, strong bases.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

2-BROMO-2-NITROPROPAN-1,3-DIOL

Avoid exposure to: light, UV rays, moisture.

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

2-BROMO-2-NITROPROPAN-1,3-DIOL

May develop: nitric oxide, carbon oxides, hydrobromic acid.

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

LC50 (Inhalation) of the mixture:

Not classified (no significant component)

LD50 (Oral) of the mixture:


>2000 mg/kg

LD50 (Dermal) of the mixture:

Not classified (no significant component)

2-BROMO-2-NITROPROPAN-1,3-DIOL

LD50 (Oral) 254 mg/kg rat

	MATERIAL SAFETY DATA SHEET Conforms to Reg. (EU) 830/2015					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. N°	Edited by	Approved by	Filed by	Page
96/18	17.12.2018	0	RLAB	DG	RLAB	7 di 11

LD50 (Dermal) 64 mg/kg rat
 LC50 (Inhalation) 0,588 mg/l/4h rat

BENZENESULFONIC ACID, C10-13-ALKYL DERIVS., SODIUM SALTS
 LD50 (Oral) 1080 mg/kg rat
 LD50 (Dermal) > 2000 mg/kg rat

ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS
 LD50 (Oral) > 2000 mg/kg rat
 LD50 (Dermal) > 2000 mg/kg rat

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

SECTION 12. Ecological information

No specific data are available for this product. Handle it according to good working practices. Avoid littering. Do not contaminate soil and waterways. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation. Please take all the proper measures to reduce harmful effects on aquifers.

12.1. Toxicity

2-BROMO-2-NITROPROPAN-1,3-DIOL

LC50 - for Fish	20 mg/l/96h <i>Oncorhynchus mykiss</i>
EC50 - for Crustacea	1,6 mg/l/48h <i>Daphnia magna</i>
EC50 - for Algae / Aquatic Plants	0,25 mg/l/72h
Chronic NOEC for Algae / Aquatic Plants	0,08 mg/l

BENZENESULFONIC ACID, C10-13-ALKYL DERIVS., SODIUM SALTS


LC50 - for Fish	1,67 mg/l/96h
EC50 - for Crustacea	2,9 mg/l/48h
EC50 - for Algae / Aquatic Plants	0,91 mg/l/72h
Chronic NOEC for Fish	0,23 mg/l 72d
Chronic NOEC for Crustacea	0,5 mg/l 7d
Chronic NOEC for Algae / Aquatic Plants	0,5 mg/l 96h

ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS

LC50 - for Fish	> 1 mg/l/96h <i>Danio rerio</i>
EC50 - for Crustacea	7,2 mg/l/48h <i>Daphnia magna</i>
EC50 - for Algae / Aquatic Plants	27 mg/l/72h <i>Desmodesmus subspicatus</i>
Chronic NOEC for Fish	0,14 mg/l 28d <i>Oncorhynchus mykiss</i>
Chronic NOEC for Crustacea	0,18 mg/l 21d <i>Daphnia magna</i>
Chronic NOEC for Algae / Aquatic Plants	0,93 mg/l <i>Desmodesmus subspicatus</i>

12.2. Persistence and degradability

2-BROMO-2-NITROPROPAN-1,3-DIOL

	<h1 style="text-align: center;">MATERIAL SAFETY DATA SHEET</h1> <p style="text-align: center;">Conforms to Reg. (EU) 830/2015</p>					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. N°	Edited by	Approved by	Filed by	Page
96/18	17.12.2018	0	RLAB	DG	RLAB	8 di 11

Solubility in water 286000 mg/l
Rapidly degradable

BENZENESULFONIC ACID, C10-13-ALKYL DERIVS., SODIUM SALTS
Rapidly degradable

ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS
Rapidly degradable

12.3. Bioaccumulative potential

2-BROMO-2-NITROPROPAN-1,3-DIOL
Partition coefficient: n-octanol/water 0,22
BCF 3,16

BENZENESULFONIC ACID, C10-13-ALKYL DERIVS., SODIUM SALTS
BCF 159

12.4. Mobility in soil

ALCOHOLS, C12-14, ETHOXYLATED, SULFATES, SODIUM SALTS
Partition coefficient: soil/water 0,34

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.1. UN number

Not applicable

14.2. UN proper shipping name


Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

	MATERIAL SAFETY DATA SHEET Conforms to Reg. (EU) 830/2015					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. N°	Edited by	Approved by	Filed by	Page
96/18	17.12.2018	0	RLAB	DG	RLAB	9 di 11

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Information not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EC: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product
Point 3

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

Regulation (EC) No. 648/2004

Ingredients according to Regulation (EC) No. 648/2004

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017)

WGK 1: Low hazard to waters


15.2. Chemical safety assessment

No chemical safety assessment has been processed for the mixture and the substances it contains.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Acute Tox. 4	Acute toxicity, category 4
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2

	<h1 style="text-align: center;">MATERIAL SAFETY DATA SHEET</h1> <p style="text-align: center;">Conforms to Reg. (EU) 830/2015</p>					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. N°	Edited by	Approved by	Filed by	Page
96/18	17.12.2018	0	RLAB	DG	RLAB	10 di 11


Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
 3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
 4. Regulation (EU) 2015/830 of the European Parliament
 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
 10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
 13. Regulation (EU) 2017/776 (X Atp. CLP)
- The Merck Index. - 10th Edition
 - Handling Chemical Safety
 - INRS - Fiche Toxicologique (toxicological sheet)
 - Patty - Industrial Hygiene and Toxicology
 - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
 - IFA GESTIS website
 - ECHA website
 - Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

	MATERIAL SAFETY DATA SHEET Conforms to Reg. (EU) 830/2015					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. N°	Edited by	Approved by	Filed by	Page
96/18	17.12.2018	0	RLAB	DG	RLAB	11 di 11

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.