



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 13/11/2019

Revision n° 3

Rev. Date 10/10/2024

Page

1 of 17

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

1.1. Product identifier

Code: F_270
Product name: LANA e DELICATI
UFI: M1H3-R01E-6000-R9HT

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

| Identified Uses | Industrial | Professional | Consumer |
|-------------------|------------|--------------|----------|
| Laundry 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 Mario Calderara, 31
District and Country: 25018 Montichiari (BS)
Italia

Tel. +39 030961 243

www.newfador.it

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

NEW FADOR S.r.l.

+39 030961 243

(08.30 - 17.30)

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 2020/878. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Classified based on the results of the ICE-PH-15/0339 study

Hazard classification and indication:

| | | |
|--|------|--|
| Eye irritation, category 2 | H319 | Causes serious eye irritation. |
| Skin irritation, category 2 | H315 | Causes skin irritation. |
| Hazardous to the aquatic environment, chronic toxicity, category 3 | H412 | Harmful to aquatic life with long lasting effects. |

2.2. Label elements

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

Hazard pictograms:





MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 13/11/2019

Revision n° 3

Rev. Date 10/10/2024

Page

2 of 17

Signal words: Warning

Hazard statements:

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.
EUH208 Contains: reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1), 1,2-benzisothiazol-3(2H)-one
May produce an allergic reaction.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P280 Wear protective gloves / 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.
P310 Immediately call a POISON CENTER.
P501 Dispose of contents / container in accordance with current regulations.

Ingredients (Regulation 648/2004)

Less than 5% Soap
5% or over but less than 15% Anionic surfactants

Perfumes

Citronellol

Preservation agents: METHYLCHLOROISOTHIAZOLINONE AND METHYLISOTHIAZOLINONE , BENZISOTHIAZOLINONE

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage \geq than 0,1%.
The product does not contain substances with endocrine disrupting properties in concentration \geq 0.1%.

SECTION 3. Composition/information on ingredients

3.1. Substances

Information not relevant

3.2. Mixtures

Contains:

| Identification | x = Conc. % | Classification (EC) 1272/2008 (CLP) |
|---|----------------|--|
| BENZENESULFONIC ACID, C10-13-ALKYL DERIVS., SODIUM SALTS | | |
| INDEX - | $7 \leq x < 8$ | Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, Aquatic Chronic 3 H412 LD50 Oral: 1080 mg/kg |
| EC 270-115-0 | | |



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 13/11/2019

Revision n° 3

Rev. Date 10/10/2024

Page

3 of 17

CAS 68411-30-3

REACH Reg. 01-2119489428-22

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

INDEX -

$4,5 \leq x < 5$

Eye Dam. 1 H318,
Skin Irrit. 2 H315,
Aquatic Chronic 3 H412
Eye Dam. 1 H318: $\geq 10\%$,
Eye Irrit. 2 H319: $\geq 5\%$ - $< 10\%$

EC 500-234-8

CAS 68891-38-3

REACH Reg. 01-2119488639-16

1,2-benzisothiazol-3(2H)-one

INDEX 613-088-00-6

$0 < x < 0,036$

Acute Tox. 2 H330,
Acute Tox. 4 H302,
Eye Dam. 1 H318,
Skin Irrit. 2 H315,
Skin Sens. 1A H317,
Aquatic Acute 1 H400 M=1,
Aquatic Chronic 1 H410 M=1
Skin Sens. 1A H317: $\geq 0,036\%$

EC 220-120-9

CAS 2634-33-5

LD50 Oral: 450 mg/kg,
ATE Inhalation mists/powders: 0,051 mg/l

**reaction mass of 5-chloro-2-
methyl-2H-isothiazol-3-one and 2-
methyl-2H-isothiazol-3-one (3:1)**

INDEX 613-167-00-5

$0 < x < 0,0015$

Acute Tox. 2 H310,
Acute Tox. 2 H330,
Acute Tox. 3 H301,
Skin Corr. 1C H314,
Eye Dam. 1 H318,
Skin Sens. 1A H317,
Aquatic Acute 1 H400 M=100,
Aquatic Chronic 1 H410 M=100,
EUH071,
Classification note according to Annex VI to the CLP Regulation: B
Skin Corr. 1C H314: $\geq 0,6\%$,
Skin Irrit. 2 H315: $\geq 0,06\%$ - $< 0,6\%$,
Skin Sens. 1A H317: $\geq 0,0015\%$,
Eye Dam. 1 H318: $\geq 0,6\%$,
Eye Irrit. 2 H319: $\geq 0,06\%$ - $< 0,6\%$
LD50 Oral: 64 mg/kg bw,
LD50 Dermal: 87,12 mg/kg bw,
LC50 Inhalation mists/powders: 0,31 mg/l/4h

EC 611-341-5

CAS 55965-84-9

MORPHOLINE

INDEX 613-028-00-9

$0 < x < 0,05$

Flam. Liq. 3 H226,
Acute Tox. 4 H302,
Acute Tox. 4 H312,
Acute Tox. 4 H332,
Skin Corr. 1B H314,
Eye Dam. 1 H318
LD50 Oral: 1050 mg/kg,
ATE Dermal: 1100 mg/kg,
LC50 Inhalation vapours: 35,1 mg/l/1h

EC 203-815-1

CAS 110-91-8

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



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 13/11/2019

Revision n° 3

Rev. Date 10/10/2024

Page

4 of 17

SECTION 4. First aid measures

4.1. Description of first aid measures

In case of doubt or in the presence of symptoms contact a doctor and show him this document.

In case of more severe symptoms, ask for immediate medical aid.

EYES: Remove, if present, contact lenses if the situation allows you to do so easily. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Take off contaminated clothing. Wash immediately and thoroughly with running water (and soap if possible). Get medical advice. Avoid further contact with contaminated clothing.

INGESTION: Do not induce vomiting unless explicitly authorised by a doctor. Do not give anything by mouth to an unconscious person. Get medical advice/attention.

INHALATION: Remove victim to fresh air, away from the accident scene. In the event of respiratory symptoms (coughing, wheezing, breathing difficulty, asthma) keep the victim in a comfortable position for breathing. If necessary administer oxygen. If the subject stops breathing, administer artificial respiration. Get medical advice/attention.

Rescuer protection

It is good practice for rescuers lending support to a person who has been exposed to a chemical substance or to a mixture to wear personal protective equipment. The nature of such protection depends on the hazard level of the substance or mixture, on the type of exposure and on the extent of the contamination. In the absence of other more specific indications, use of disposable gloves in the event of possible contact with body fluids is recommended. For the type of PPE suitable for the characteristics of the substance or mixture, see section 8.

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

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

DELAYED EFFECTS: Based on the information currently available, there are no known cases of delayed effects following exposure to this product.

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

If symptoms occur, whether acute or delayed, consult a doctor.

Means to have available in the workplace for specific and immediate treatment

Running water for skin and eye wash.

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



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 13/11/2019

Revision n° 3

Rev. Date 10/10/2024

Page

5 of 17

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 fire fighting 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

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory references:

BGR България НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г. ЗА ЗАЩИТА НА РАБОТЕЩИТЕ ОТ РИСКОВЕ,



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 13/11/2019

Revision n° 3

Rev. Date 10/10/2024

Page

6 of 17

| | | |
|-----|-----------------|--|
| CZE | Česká Republika | СВЪРЗАНИ С ЕКСПОЗИЦИЯ НА ХИМИЧНИ АГЕНТИ ПРИ РАБОТА (изм. ДВ. бр.5 от 17 Януари 2020г.) |
| DEU | Deutschland | NAŘÍZENÍ VLÁDY ze dne 10. května 2021, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci |
| DNK | Danmark | Forschungsgemeinschaft MAK- und BAT-Werte-Liste 2022 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe Mitteilung 58 |
| ESP | España | Bekendtgørelse om grænseværdier for stoffer og materialer - BEK nr 1458 af 13/12/2019 |
| FRA | France | Límites de exposición profesional para agentes químicos en España 2023 |
| FIN | Suomi | Valeurs limites d'exposition professionnelle aux agents chimiques en FranceDécret n° 2021-1849 du 28 décembre 2021 |
| GRC | Ελλάδα | ΗΤΡ-ΥΑΡΔΕΝ 2020. Koncentrationer som befunnits skadliga. SOCIAL - OCH HÄLSOVÅRDSMINISTERIETS PUBLIKATIONER 2020:25 |
| HUN | Magyarország | Π.Δ. 26/2020 (ΦΕΚ 50/Α' 6.3.2020) Εναρμόνιση της ελληνικής νομοθεσίας προς τις διατάξεις των οδηγιών 2017/2398/ΕΕ, 2019/130/ΕΕ και 2019/983/ΕΕ «για την τροποποίηση της οδηγίας 2004/37/ΕΚ ``σχετικά με την προστασία των εργαζομένων από τους κινδύνους που συνδέονται με την έκθεση σε καρκινογόνους ή μεταλλαξιογόνους παράγοντες κατά την εργασία``» |
| ITA | Italia | Az innovációért és technológiáért felelős miniszter 5/2020. (II. 6.) ITM rendelete a kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelmérl |
| NOR | Norge | Decreto Legislativo 9 Aprile 2008, n.81 |
| NLD | Nederland | Forskrift om endring i forskrift om tiltaksverdi og grenseverdi for fysiske og kjemiske faktorer i arbeidsmiljøet samt smitterisikogrupper for biologiske faktorer (forskrift om tiltaks- og grenseverdi), 21. august 2018 nr. 1255 |
| PRT | Portugal | Arbeidsomstandighedenregeling. Lijst van wettelijke grenswaarden op grond van de artikelen 4.3, eerste lid, en 4.16, eerste lid, van het Arbeidsomstandighedenbesluit |
| POL | Polska | Decreto-Lei n.º 1/2021 de 6 de janeiro, valores-limite de exposição profissional indicativos para os agentes químicos. Decreto-Lei n.º 35/2020 de 13 de julho, proteção dos trabalhadores contra os riscos ligados à exposição durante o trabalho a agentes cancerígenos ou mutagénicos |
| ROU | România | Rozporządzenie ministra rozwoju, pracy i technologii z dnia 18 lutego 2021 r. Zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy |
| SWE | Sverige | Hotărârea nr. 53/2021 pentru modificarea hotărârii guvernului nr. 1.218/2006, precum și pentru modificarea și completarea hotărârii guvernului nr. 1.093/2006 |
| SVK | Slovensko | Hygieniska gränsvärden, Arbetsmiljöverkets föreskrifter och allmänna råd om hygieniska gränsvärden (AFS 2018:1) |
| SVN | Slovenija | NARIADENIE VLÁDY Slovenskej republiky z 12. augusta 2020, ktorým sa mení a dopĺňa nariadenie vlády Slovenskej republiky č. 356/2006 Z. z. o ochrane zdravia zamestnancov pred rizikami súvisiacimi s expozíciou karcinogénym a mutagénym faktorom pri práci v znení neskorších predpisov |
| GBR | United Kingdom | Pravilnik o varovanju delavcev pred tveganji zaradi izpostavljenosti kemičnim snovem pri delu (Uradni list RS, št. 100/01, 39/05, 53/07, 102/10, 43/11 – ZVZD-1, 38/15, 78/18 in 78/19) |
| EU | OEL EU | EH40/2005 Workplace exposure limits (Fourth Edition 2020) |
| | TLV-ACGIH | Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC. |
| | | ACGIH 2023 |

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 | | | Chronic systemic | Effects on workers | | | Chronic systemic |
|-------------------|----------------------|----------------|---------------|------------------|--------------------|----------------|---------------|------------------|
| | Acute local | Acute systemic | Chronic local | | Acute local | Acute systemic | Chronic local | |
| Oral | | | | 0,425 mg/kg bw/d | | | | |
| Inhalation | | | 1,5 | 1,5 mg/m3 | | | 6 | 6 mg/m3 |
| Skin | | | | 42,5 mg/kg bw/d | | | | 85 mg/kg bw/d |



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 13/11/2019

Revision n° 3

Rev. Date 10/10/2024

Page

7 of 17

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/m3 | | | | 175 mg/m3 |
| Skin | | | | 1650 mg/kg bw/d | | | | 2750 mg/kg bw/d |

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

Threshold Limit Value

| Type | Country | TWA/8h | STEL/15min | Remarks / Observations |
|------|---------|--------|------------|------------------------|
| | | mg/m3 | ppm | |
| MAK | DEU | 0,2 | 0,4 | INHAL |

Predicted no-effect concentration - PNEC

| | | |
|--|-------|-------|
| Normal value in fresh water | 3,39 | µg/L |
| Normal value in marine water | 3,39 | µg/L |
| Normal value for fresh water sediment | 0,027 | mg/kg |
| Normal value for marine water sediment | 0,027 | mg/kg |
| Normal value of STP microorganisms | 0,23 | mg/l |
| Normal value for the terrestrial compartment | 0,01 | 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 | | 0,11 mg/kg bw/d | | 0,09 mg/kg bw/d | | | | |
| Inhalation | 0,04 mg/m3 | | 0,02 mg/m3 | | 0,04 mg/m3 | | 0,02 mg/m3 | |

MORPHOLINE

Threshold Limit Value

| Type | Country | TWA/8h | STEL/15min | Remarks / Observations |
|------|---------|--------|------------|------------------------|
| | | mg/m3 | ppm | |
| TLV | BGR | 36 | 72 | |
| TLV | CZE | 35 | 70 | |
| AGW | DEU | 36 | 72 | SKIN |
| MAK | DEU | 36 | 72 | |
| TLV | DNK | 36 | 72 | SKIN |
| VLA | ESP | 36 | 72 | E |



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 13/11/2019

Revision n° 3

Rev. Date 10/10/2024

Page

8 of 17

| | | | | | | |
|-----------|-----|----|----|----|----|------|
| VLEP | FRA | 36 | 10 | 72 | 20 | |
| HTP | FIN | 36 | 10 | 72 | 20 | SKIN |
| TLV | GRC | 36 | 10 | 72 | 20 | |
| AK | HUN | 36 | | 72 | | |
| VLEP | ITA | 36 | 10 | 72 | 20 | SKIN |
| TLV | NOR | 36 | 10 | | | SKIN |
| TGG | NLD | 36 | | 72 | | SKIN |
| VLE | PRT | 36 | 10 | 72 | 20 | |
| NDS/NDSch | POL | 36 | | 72 | | SKIN |
| TLV | ROU | 36 | 10 | 72 | 20 | |
| NGV/KGV | SWE | 35 | 10 | 72 | 20 | |
| NPEL | SVK | 36 | 10 | 72 | 20 | |
| MV | SVN | 36 | 10 | 72 | 20 | SKIN |
| WEL | GBR | 36 | 10 | 72 | 20 | SKIN |
| OEL | EU | 36 | 10 | 72 | 20 | |
| TLV-ACGIH | | 71 | 20 | | | SKIN |

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

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.

The following should be considered when choosing work glove material (see standard EN 374): compatibility, degradation, permeability time.

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 II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (see standard EN ISO 16321).

RESPIRATORY PROTECTION

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. Use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387).

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



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 13/11/2019

Revision n° 3

Rev. Date 10/10/2024

Page

9 of 17

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

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Properties | Value | Information |
|--|---------------------------|--|
| Appearance | liquid | Temperature: 20 °C |
| Colour | pink | Temperature: 20 °C |
| Odour | characteristic | Method: internal |
| Melting point / freezing point | 0 °C | Method: literature data |
| | | Substance:WATER |
| Initial boiling point | 100 °C | Method: literature data |
| | | Substance:WATER |
| | | Initial boiling point: 100 °C |
| Flammability | not available | Reason for missing data: The substance/mixture is not flammable |
| Lower explosive limit | not available | Reason for missing data: The substance/mixture is not flammable |
| Upper explosive limit | not available | Reason for missing data: The substance/mixture is not explosive |
| Flash point | not available | Reason for missing data: The substance/mixture is not flammable |
| Auto-ignition temperature | not available | Reason for missing data: The substance/mixture does not self -have |
| Decomposition temperature | not available | Reason for missing data: It only applies to authoritative substances and mixtures, organic peroxides and other substances and mixtures that they can decompose |
| pH | 8 - 9 | Method: internal method |
| | | Concentration: 100 % |
| | | Temperature: 20 °C |
| Kinematic viscosity | 300 +/- 50 mm2/sec | Method: internal |
| | | Temperature: 20 °C |
| Solubility | Complete in water | Method: internal |
| | | Temperature: 20 °C |
| Partition coefficient: n-octanol/water | not available | Reason for missing data: does not apply to inorganic and ionic liquids and, as a rule, it does not apply to blends |
| Vapour pressure | 0,02 Atm | Method: dato di letteratura |
| | | Substance: WATER |
| | | Vapour pressure: 17,5 mmHg |
| | | Temperature: 20 °C |
| Density and/or relative density | 1,018 | |
| Relative vapour density | 0,0006 kg/dm3 | Method:Literature data |
| | | Substance:WATER |
| | | Temperature: 0 °C |
| Particle characteristics | | |
| Median equivalent diameter | | |
| Remark: | It only applies to solids | |
| Size distribution | | |
| Remark: | It only applies to solids | |



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 13/11/2019

Revision n° 3

Rev. Date 10/10/2024

Page

10 of 17

Dustiness

Remark: It only applies to solids

Specific surface area

Remark: It only applies to solids

Shape

Remark: It only applies to solids

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

Explosive properties not available

Reason for missing data: Absent chemical groups associated with explosive properties in accordance with the provisions of Annex I, Part 2, chap. 2.1.4.3 of Reg. (EC) 1272/2008 - CLP

Oxidising properties not available

Reason for missing data: Absent requirements related to the presence of atoms or chemical bonds associated with oxidizing properties in the molecules of the components according to Annex I, Part 2, 2.13.4 Reg. (CE) 1272/2008

SECTION 10. Stability and reactivity

10.1. Reactivity

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

MORPHOLINE

On contact with: strong oxidising agents, reducing agents, strong acids, strong bases. May develop: heat.

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.

10.5. Incompatible materials

Information not available



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 13/11/2019

Revision n° 3

Rev. Date 10/10/2024

Page

11 of 17

10.6. Hazardous decomposition products

Information not available

SECTION 11. Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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

ATE (Inhalation) of the mixture: Not classified (no significant component)

ATE (Oral) of the mixture: >2000 mg/kg

ATE (Dermal) of the mixture: Not classified (no significant component)

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

LD50 (Dermal): > 2000 mg/kg rat

LD50 (Oral): 1080 mg/kg rat

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

LD50 (Dermal): > 2000 mg/kg rat

LD50 (Oral): > 2000 mg/kg rat

1,2-benzisothiazol-3(2H)-one

LD50 (Oral): 450 mg/kg

LC50 (Inhalation mists/powders): 0,21 mg/l

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

LD50 (Dermal): 87,12 mg/kg bw rat

LD50 (Oral): 64 mg/kg bw rat

LC50 (Inhalation mists/powders): 0,31 mg/l/4h rat

MORPHOLINE

LD50 (Dermal): 500 mg/kg Rabbit

ATE (Dermal): 1100 mg/kg estimate from table 3.1.2 of Annex I of the CLP
(figure used for calculation of the acute toxicity estimate of the mixture)

LD50 (Oral): 1050 mg/kg Rat

LC50 (Inhalation vapours): 35,1 mg/l/1h Rat

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

May produce an allergic reaction.

Contains:

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

1,2-benzisothiazol-3(2H)-one



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 13/11/2019

Revision n° 3

Rev. Date 10/10/2024

Page

12 of 17

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

11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

SECTION 12. Ecological information

This product is dangerous for the environment and the aquatic organisms. In the long term, it has negative effects on the aquatic environment.

12.1. Toxicity

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

LC50 - for Fish

0,58 mg/l/96h Danio rerio

EC50 - for Crustacea

1,02 mg/l/48h Daphnia magna

EC50 - for Algae / Aquatic Plants

0,379 mg/l/72h IC50, Pseudokirchneriella subcapitata

Chronic NOEC for Fish

0,007 mg/l Salvelinus fontinalis, 30d

Chronic NOEC for Crustacea

0,013 mg/l Dafnia

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 Danio rerio

EC50 - for Crustacea

7,2 mg/l/48h Daphnia magna

EC50 - for Algae / Aquatic Plants

27 mg/l/72h Desmodesmus subspicatus

Chronic NOEC for Fish

0,14 mg/l 28d Oncorhynchus mykiss

Chronic NOEC for Crustacea

0,18 mg/l 21d Daphnia magna

Chronic NOEC for Algae / Aquatic Plants

0,93 mg/l Desmodesmus subspicatus



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 13/11/2019

Revision n° 3

Rev. Date 10/10/2024

Page

13 of 17

12.2. Persistence and degradability

MORPHOLINE

Solubility in water 1000 - 10000 mg/l

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

NOT 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

MORPHOLINE

Partition coefficient: n-octanol/water -2,55

BCF < 0,65

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

BCF 159

12.4. Mobility in soil

Information not available

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 \geq than 0,1%.

12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

12.7. 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.

The management of waste arising from the use or dispersal of this product must be organised in accordance with occupational safety regulations. See section 8 for possible need for PPE.

CONTAMINATED PACKAGING

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



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 13/11/2019

Revision n° 3

Rev. Date 10/10/2024

Page

14 of 17

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 or ID 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

14.5. Environmental hazards

not applicable

14.6. Special precautions for user

not applicable

14.7. Maritime transport in bulk according to IMO instruments

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/EU: None

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

Product

Point 3 - 40

Contained substance

Point 75

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

not applicable

Substances in Candidate List (Art. 59 REACH)

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



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 13/11/2019

Revision n° 3

Rev. Date 10/10/2024

Page

15 of 17

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 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.

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

SECTION 16. Other information

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

| | |
|--------------------------|--|
| Flam. Liq. 3 | Flammable liquid, category 3 |
| Acute Tox. 2 | Acute toxicity, category 2 |
| Acute Tox. 3 | Acute toxicity, category 3 |
| Acute Tox. 4 | Acute toxicity, category 4 |
| Skin Corr. 1B | Skin corrosion, category 1B |
| Skin Corr. 1C | Skin corrosion, category 1C |
| Eye Dam. 1 | Serious eye damage, category 1 |
| Eye Irrit. 2 | Eye irritation, category 2 |
| Skin Irrit. 2 | Skin irritation, category 2 |
| Skin Sens. 1A | Skin sensitization, category 1A |
| Aquatic Acute 1 | Hazardous to the aquatic environment, acute toxicity, category 1 |
| Aquatic Chronic 1 | Hazardous to the aquatic environment, chronic toxicity, category 1 |
| Aquatic Chronic 3 | Hazardous to the aquatic environment, chronic toxicity, category 3 |
| H226 | Flammable liquid and vapour. |
| H310 | Fatal in contact with skin. |
| H330 | Fatal if inhaled. |
| H301 | Toxic if swallowed. |
| H302 | Harmful if swallowed. |
| H312 | Harmful in contact with skin. |



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 13/11/2019

Revision n° 3

Rev. Date 10/10/2024

Page

16 of 17

| | |
|--------|---|
| H332 | Harmful if inhaled. |
| H314 | Causes severe skin burns and eye damage. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |
| EUH071 | Corrosive to the respiratory tract. |

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 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: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent, bioaccumulative and toxic
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PMT: Persistent, mobile and toxic
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 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: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very persistent and very bioaccumulative
- vPvM: Very persistent and very mobile
- 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) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) 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)
14. Regulation (EU) 2018/669 (XI Atp. CLP)



MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 13/11/2019

Revision n° 3

Rev. Date 10/10/2024

Page

17 of 17

- 15. Regulation (EU) 2019/521 (XII Atp. CLP)
- 16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
- 17. Regulation (EU) 2019/1148
- 18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
- 19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
- 20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
- 21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
- 22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)
- 23. Delegated Regulation (UE) 2023/707
- 24. Delegated Regulation (UE) 2023/1434 (XIX Atp. CLP)
- 25. Delegated Regulation (UE) 2023/1435 (XX Atp. CLP)
- 26. Delegated Regulation (UE) 2024/197 (XXI 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

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.

CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review:

The following sections were modified:

02 / 03 / 04 / 08 / 09 / 11 / 12 / 13 / 15 / 16.