



Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

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

1.1. Product identifier

Code: **IMG01**
Product name: **NO-DROP WATER-BASED IMPREGNATING AGENT FOR WOOD PINE**

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

Intended use: **Paint product**

1.3. Details of the supplier of the safety data sheet

Name: **ICA S.p.A.**
Full address: **Via S. Pertini, 52**
District and Country: **62012 Civitanova Marche (MC)**
ITALY
Tel. **+39 0733 8080**
Fax **+39 0733 808140**

e-mail address of the competent person responsible for the Safety Data Sheet: **regulatoryaffairs@icaspa.com**

Product distribution by: **INDUSTRIA CHIMICA ADRIATICA S.p.A.**

1.4. Emergency telephone number

For urgent inquiries refer to: **Centro antiveleni – Ospedale di Firenze (24/24 h)**
Telefono: +39 055 794 7819

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is not classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP). However, since the product contains hazardous substances in concentrations such as to be declared in section no. 3, it requires a safety data sheet with appropriate information, compliant to (EU) Regulation 2015/830.

Hazard classification and indication: --

2.2. Label elements

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

Hazard pictograms: --

Signal words: --

Hazard statements:

EUH210 Safety data sheet available on request.
EUH208 Contains: Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)
1,2-Benzisothiazol-3(2H)-one
May produce an allergic reaction.

Precautionary statements: --

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) |
|----------------------------------|--------------------------|--|
| 2-(2-Butoxyethoxy)Ethanol | | |
| CAS | 112-34-5 1,5 ≤ x < 2 | Eye Irrit. 2 H319 |
| EC | 203-961-6 | |
| INDEX | 603-096-00-8 | |
| Reg. no. | 01-2119475104-44-XXXX | |
| Ethanol | | |
| CAS | 64-17-5 0 ≤ x < 0,05 | Flam. Liq. 2 H225, Eye Irrit. 2 H319 |
| EC | 200-578-6 | |
| INDEX | 603-002-00-5 | |
| Reg. no. | 01-2119457610-43-XXXX | |
| Ethanolamine | | |
| CAS | 141-43-5 0 ≤ x < 0,05 | Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Skin Corr. 1B H314, Eye Dam. 1 H318, STOT SE 3 H335 |
| EC | 205-483-3 | |
| INDEX | 603-030-00-8 | |
| Reg. no. | 01-2119486455-28-XXXX | |
| Butanone | | |
| CAS | 78-93-3 0 ≤ x < 0,05 | Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066 |
| EC | 201-159-0 | |
| INDEX | 606-002-00-3 | |
| Reg. no. | 01-2119457290-43-XXXX | |
| Acrylic acid | | |
| CAS | 79-10-7 0 ≤ x < 0,05 | Flam. Liq. 3 H226, Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Skin Corr. 1A H314, Eye Dam. 1 H318, Aquatic Acute 1 H400 M=1, Aquatic Chronic 2 H411, Classification note according to Annex VI to the CLP Regulation: D |
| EC | 201-177-9 | |
| INDEX | 607-061-00-8 | |
| Reg. no. | 01-2119452449-31-XXXX | |
| 2-butoxyethanol | | |
| CAS | 111-76-2 0 ≤ x < 0,05 | Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Eye Irrit. 2 H319, Skin Irrit. 2 H315 |
| EC | 203-905-0 | |
| INDEX | 603-014-00-0 | |
| Reg. no. | 01-2119475108-36-XXXX | |

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 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

Obtain medical attention if soreness or redness persists.

Remove contact lens if easily possible.

Never give anything by mouth to an unconscious person.

Do not under any circumstances induce vomiting.

If vomiting should occur spontaneously keep airway clear.

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

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



SECTION 4. First aid measures ... / >>

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

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.

Extinguishing media which must not be used for safety reasons:

Water jet.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

Thermal decomposition can lead to the evolution of irritant vapour.

Product may polymerize at high temperatures.

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 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).

Cool the containers exposed to the fire with water.

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.

Always keep the containers tightly closed.

Store at temperatures between 5°C and 35°C.

Keep away from strong bases, peroxides, free radical.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

7.3. Specific end use(s)

See paragraph 1.2. For further information consult the technical data sheet.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

| | | |
|-----|-----------------|--|
| BGR | България | МИНИСТЕРСТВО НА ТРУДА И СОЦИАЛНАТА ПОЛИТИКА МИНИСТЕРСТВО НА ЗДРАВЕОПАЗВАНЕТО НАРЕДБА No 13 от 30 декември 2003 г (4 Септември 2018г) |
| CZE | Česká Republika | Nařízení vlády č. 246/2018 Sb. Nařízení vlády, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci, ve znění pozdějších předpisů |
| DEU | Deutschland | TRGS 900 - Seite 1 von 69 (Fassung 29.03.2019)- Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte |
| DNK | Danmark | Bekendtgørelse om ændring af bekendtgørelse om grænseværdier for stoffer og materialer1- BEK nr 655 af 31/05/2018 |
| ESP | España | LÍMITES DE EXPOSICIÓN PROFESIONAL PARA AGENTES QUÍMICOS EN ESPAÑA 2019 (INSST) |
| FIN | Suomi | HTP-VÄRDEN 2018. Koncentrationer som befunnits skadliga. SOCIAL- OCH HÄLSOVÄRDSMINISTERIETS PUBLIKATIONER 10/2018 |
| FRA | France | Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS |
| GBR | United Kingdom | EH40/2005 Workplace exposure limits (Third edition,published 2018) |
| GRC | Ελλάδα | ΕΦΗΜΕΡΙΔΑ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ - ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 152 - 21 Αυγούστου 2018 |
| HRV | Hrvatska | Pravilnik o zaštiti radnika od izloženosti opasnim kemikalijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 91/18) |
| HUN | Magyarország | A pénzügyminiszter 7/2018. (VIII. 29.) PM rendelete a munkahelyek kémiai biztonságáról szóló 25/2000. (IX. 30.) EüM–SZCSM együttes rendelet módosításáról |
| ITA | Italia | DIRETTIVA (UE) 2017/164 DELLA COMMISSIONE del 31 gennaio 2017 |
| LTU | Lietuva | LIETUVOS HIGIENOS NORMA HN 23:2011 „CHEMINIŲ MEDŽIAGŲ PROFESINIO POVEIKIO RIBINIAI DYDŽIAI. MATAVIMO IR POVEIKIO VERTINIMO BENDRIEJI REIKALAVIMAI. Nr. V-695/A1-272, 2018-06-12, paskelbta TAR 2018-06-15, i. k. 2018-09988 |
| NLD | Nederland | Regeling van de Staatssecretaris van Sociale Zaken en Werkgelegenheid van 13 juli 2018, 2018-0000118517 tot wijziging van de Arbeidsomstandighedenregeling in verband met de implementatie van Richtlijn 2017/164 in Bijlage XIII |
| NOR | Norge | Fastsatt av Arbeids- og sosialdepartementet 21. august 2018 med hjemmel i lov 17. juni 2005 nr. 62 om arbeidsmiljø, arbeidstid, stillingsvern mv. (arbeidsmiljøloven) § 1-3, § 1-4 og § 4-5 |
| POL | Polska | ROZPORZĄDZENIE MINISTRA RODZINY, PRACY I POLITYKI SPOŁECZNEJ z dnia 12 czerwca 2018 r |
| PRT | Portugal | Ministério da Economia e do Emprego Consolida as prescrições mínimas em matéria de protecção dos trabalhadores contra os riscos para a segurança e a saúde devido à exposição a agentes químicos no trabalho - Diário da República, 1.ª série - N.º 111 - 11 de junho de 2018 |
| ROU | România | HOTĂRÂRE nr. 584 din 2 august 2018 pentru modificarea Hotărârii Guvernului nr. 1.218/2006 privind stabilirea cerințelor minime de securitate și sănătate în muncă pentru asigurarea protecției lucrătorilor împotriva riscurilor legate de prezența agenților chimici |
| SVK | Slovensko | Nariadenie vlády č. 33/2018 Z. z. Nariadenie vlády Slovenskej republiky, ktorým sa mení a dopĺňa nariadenie vlády Slovenskej republiky č. 355/2006 Z. z. o ochrane zamestnancov pred rizikami súvisiacimi s expozíciou chemickým faktorom pri práci v znení neskorších predpisov |



SECTION 8. Exposure controls/personal protection ... / >>

| | | |
|-----|-----------|---|
| SVN | Slovenija | Uradni list Republike Slovenije 04.12.2018 - Uradnem listu RS št. 78 -PRAVILNIK o varovanju delavcev pred tveganji zaradi izpostavljenosti kemičnim snovem pri delu |
| EU | OEL EU | 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 91/322/EEC. |
| | TLV-ACGIH | ACGIH 2019 |

2-(2-Butoxyethoxy)Ethanol

Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|------|---------|--------|-----|------------|--------|------------------------|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| TLV | DNK | 100 | | 200 | | |
| TLV | NOR | 68 | 10 | | | |
| OEL | EU | 67,5 | 10 | 101,2 (C) | 15 (C) | |

Predicted no-effect concentration - PNEC

| | | |
|--|-----|-------|
| Normal value in fresh water | 1 | mg/l |
| Normal value in marine water | 0,1 | mg/l |
| Normal value for fresh water sediment | 4 | mg/kg |
| Normal value for marine water sediment | 0,4 | mg/kg |
| Normal value for the terrestrial compartment | 0,4 | mg/kg |

Health - Derived no-effect level - DNEL / DMEL

| Route of exposure | Effects on consumers | | Effects on workers | | | | | |
|-------------------|----------------------|----------|--------------------|----------|-------|----------|---------|----------|
| | Acute | Acute | Chronic | Chronic | Acute | Acute | Chronic | Chronic |
| | local | systemic | local | systemic | local | systemic | local | systemic |
| Oral | | | VND | 1,25 | | | | |
| | | | | mg/kg | | | | |
| Inhalation | 50,6 | VND | VND | 34 | 101,2 | VND | 67,5 | 67,5 |
| | mg/m3 | | | mg/m3 | mg/m3 | | mg/m3 | mg/m3 |
| Skin | | | VND | 10 | | | VND | 20 |
| | | | | mg/kg | | | | mg/kg |

Ethanol

Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|------|---------|--------|------|------------|------|------------------------|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| TLV | DNK | 1900 | 1000 | 3800 | 2000 | |
| VLEP | ITA | | 1000 | | 1000 | |
| TLV | NOR | 950 | 500 | | | |
| OEL | EU | | 1000 | | 1000 | |

Predicted no-effect concentration - PNEC

| | | |
|--|------|-------|
| Normal value in fresh water | 0,96 | mg/l |
| Normal value in marine water | 0,79 | mg/l |
| Normal value for fresh water sediment | 3,6 | mg/kg |
| Normal value for marine water sediment | 2,9 | mg/kg |
| Normal value of STP microorganisms | 580 | mg/l |
| Normal value for the terrestrial compartment | 0,63 | mg/kg |

Health - Derived no-effect level - DNEL / DMEL

| Route of exposure | Effects on consumers | | Effects on workers | | | | | |
|-------------------|----------------------|----------|--------------------|----------|-------|----------|---------|-----------|
| | Acute | Acute | Chronic | Chronic | Acute | Acute | Chronic | Chronic |
| | local | systemic | local | systemic | local | systemic | local | systemic |
| Oral | | | | 87 | | | VND | 343 |
| | | | | mg/kg/d | | | | mg/kg/24h |
| Inhalation | 950 | | | 114 | 1900 | | VND | 950 |
| | mg/m3 | | | mg/m3 | mg/m3 | | | mg/m3 |
| Skin | | | | 206 | | | VND | 343 |
| | | | | mg/kg/d | | | | mg/kg/24h |

SECTION 8. Exposure controls/personal protection ... / >>
Ethanolamine
Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|-----------|---------|-------------------|--------|-------------------|--------|------------------------|
| | | mg/m ³ | ppm | mg/m ³ | ppm | |
| TLV | BGR | 2,5 | 1 | 7,6 | 3 | SKIN |
| TLV | CZE | 2,5 | 1,0025 | 7,5 | 3,0075 | |
| AGW | DEU | 0,5 | 0,2 | 0,5 | 0,2 | SKIN |
| MAK | DEU | 0,51 | 0,2 | 0,51 | 0,2 | |
| TLV | DNK | 2,5 | 1 | | | SKIN E |
| VLA | ESP | 2,5 | 1 | 7,5 | 3 | SKIN |
| HTP | FIN | 2,5 | 1 | 7,6 | 3 | SKIN |
| VLEP | FRA | 2,5 | 1 | 7,6 | 3 | SKIN |
| WEL | GBR | 2,5 | 1 | 7,6 | 3 | SKIN |
| TLV | GRC | 2,5 | 1 | 7,6 | 3 | |
| GVI/KGVI | HRV | 2,5 | 1 | 7,6 | 3 | SKIN |
| AK | HUN | 2,5 | | 7,6 | | SKIN |
| VLEP | ITA | 2,5 | 1 | 7,6 | 3 | SKIN |
| RD | LTU | 2,5 | 1 | 7,6 | 3 | SKIN |
| TGG | NLD | 2,5 | | 7,6 | | SKIN |
| TLV | NOR | 2,5 | 1 | | | SKIN |
| NDS/NDSch | POL | 2,5 | | 7,5 | | SKIN |
| VLE | PRT | 2,5 | 1 | 7,6 | 3 | SKIN |
| TLV | ROU | 2,5 | 1 | 7,6 | 3 | SKIN |
| NPEL | SVK | 2,5 | 1 | 7,6 | 3 | SKIN |
| MV | SVN | 2,5 | 1 | 7,6 | 3 | SKIN |
| OEL | EU | 2,5 | 1 | 7,6 | 3 | SKIN |
| TLV-ACGIH | | 7,5 | 3 | 15 | 6 | |

Butanone
Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|-----------|---------|-------------------|-----|-------------------|-----|------------------------|
| | | mg/m ³ | ppm | mg/m ³ | ppm | |
| AGW | DEU | 600 | 200 | 600 | 200 | |
| TLV | DNK | 145 | 50 | 290 | 100 | |
| VLA | ESP | 600 | 200 | 900 | 300 | |
| HTP | FIN | | | 300 | 100 | |
| VLEP | FRA | 600 | 200 | 900 | 300 | |
| WEL | GBR | 600 | 200 | 899 | 300 | |
| AK | HUN | 600 | | 900 | | |
| VLEP | ITA | 600 | 200 | 900 | 300 | |
| TLV | NOR | 220 | 75 | | | |
| NDS/NDSch | POL | 450 | | 900 | | |
| OEL | EU | 600 | 200 | 900 | 300 | |
| TLV-ACGIH | | | 200 | | 300 | |

Predicted no-effect concentration - PNEC

| | | |
|--|--------|-------|
| Normal value in fresh water | 55,8 | mg/l |
| Normal value in marine water | 55,8 | mg/l |
| Normal value for fresh water sediment | 284,74 | mg/kg |
| Normal value for marine water sediment | 287,7 | mg/kg |
| Normal value for water, intermittent release | 55,8 | mg/l |
| Normal value of STP microorganisms | 709 | mg/l |
| Normal value for the terrestrial compartment | 22,5 | 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 | | | | 31 mg/kg | | | | |
| Inhalation | | | | 106 mg/m ³ | | | VND | 600 mg/m ³ |
| Skin | | 412 mg/kg | | | | | | 1161 mg/kg |

SECTION 8. Exposure controls/personal protection ... / >>
Acrylic acid
Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|-----------|---------|-------------------|-------|-------------------|--------|------------------------|
| | | mg/m ³ | ppm | mg/m ³ | ppm | |
| TLV | BGR | 29 | 10 | 59 | 20 | STEL: 1' |
| TLV | CZE | 29 | 9,889 | 59 | 20,119 | NPK-P: 1 min |
| AGW | DEU | 30 | 10 | 30 (C) | 10 (C) | |
| MAK | DEU | 30 | 10 | 30 | 10 | |
| TLV | DNK | 5,9 | 2 | | | SKIN |
| HTP | FIN | 6 | 2 | 45 (C) | 15 (C) | |
| VLEP | FRA | 6 | 2 | 30 | 10 | |
| WEL | GBR | 29 | 10 | 59 | 20 | STEL: 1-minute |
| TLV | GRC | 29 | 10 | 59 | 20 | STEL: 1' |
| GVI/KGVI | HRV | 29 | 10 | 59 | 20 | KGVI: 1 min |
| AK | HUN | 29 | | 59 | | CK: 1 min |
| VLEP | ITA | 29 | 10 | 59 | 20 | STEL: 1' |
| RD | LTU | 29 | 10 | 59 (C) | 20 (C) | |
| TGG | NLD | 29 | | 59 | | TGG: 1 min |
| TLV | NOR | 29 | 10 | 59 | 20 | |
| NDS/NDSch | POL | 10 | | 29,5 | | SKIN |
| VLE | PRT | 29 | 10 | 59 | 20 | STEL: 10 min |
| TLV | ROU | 29 | 10 | 59 | 20 | STEL: 1' |
| NPEL | SVK | 29 | 10 | 59 | 20 | NPEL: 1' |
| OEL | EU | 29 | 10 | 59 | 20 | STEL: 1' |
| TLV-ACGIH | | 6 | 2 | | | |

Predicted no-effect concentration - PNEC

| | | |
|--|--------|-------|
| Normal value in fresh water | 0,003 | mg/l |
| Normal value in marine water | 0,0003 | mg/l |
| Normal value for fresh water sediment | 0,0236 | mg/kg |
| Normal value for the terrestrial compartment | 1 | 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 |
| Inhalation | | | | | 30 mg/m ³ | VND | 30 mg/m ³ | VND |

2-butoxyethanol
Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|------|---------|-------------------|-----|-------------------|-----|------------------------|
| | | mg/m ³ | ppm | mg/m ³ | ppm | |
| OEL | EU | 98 | 20 | 246 | 50 | SKIN |

Predicted no-effect concentration - PNEC

| | | |
|--|------|-------|
| Normal value in fresh water | 8,8 | mg/l |
| Normal value in marine water | 0,88 | mg/l |
| Normal value for fresh water sediment | 34,6 | mg/kg |
| Normal value for marine water sediment | 3,46 | mg/kg |
| Normal value for the terrestrial compartment | 3,13 | 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 | | | VND | 3,2 mg/kg | | | | |
| Inhalation | | | VND | 49 mg/m ³ | | | VND | 98 mg/m ³ |
| Skin | | | VND | 38 mg/kg | | | VND | 75 mg/kg |

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.

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.



SECTION 8. Exposure controls/personal protection ... / >>

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

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 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 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 A 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.

Protection for hands:

Do not use natural rubber gloves. Do not wear PVC gloves as PVC absorbs acrylates.

Respiratory protection:

Use respiratory protection where ventilation is insufficient or exposure is prolonged. [Es. mask with filter typo A (vapors) and/or P (powders) - Norma EN141].

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Properties | Value | Information |
|--|------------------|-------------|
| Appearance | liquid | |
| Colour | Not available | |
| Odour | characteristic | |
| Odour threshold | Not available | |
| pH | Not available | |
| Melting point / freezing point | Not available | |
| Initial boiling point | Not available | |
| Boiling range | Not available | |
| Flash point | > 60 °C | |
| Evaporation Rate | Not available | |
| Flammability of solids and gases | Not available | |
| Lower inflammability limit | Not available | |
| Upper inflammability limit | Not available | |
| Lower explosive limit | Not available | |
| Upper explosive limit | Not available | |
| Vapour pressure | Not available | |
| Vapour density | Not applicable | |
| Relative density | 1,01 | |
| Solubility | soluble in water | |
| Partition coefficient: n-octanol/water | Not available | |
| Auto-ignition temperature | Not available | |
| Decomposition temperature | Not available | |
| Viscosity | Not available | |
| Explosive properties | Not available | |
| Oxidising properties | Not available | |

9.2. Other information

Total solids (250°C / 482°F) 11,59 %

**SECTION 9. Physical and chemical properties** ... / >>

| | | | | |
|------------------------------|--------|---|------|---------|
| VOC (Directive 2010/75/EC) : | 0,05 % | - | 0,50 | g/litre |
| VOC (volatile carbon) : | 0,03 % | - | 0,26 | g/litre |

SECTION 10. Stability and reactivity**10.1. Reactivity**

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

Acrylic acid

Keep away from: oxidising agents. Maintaining a temperature of less than 13°C/55°F. May polymerise if exposed to: 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.

Ethanolamine

May react dangerously with: acrylonitrile, chloroepoxypropane, chlorosulphuric acid, hydrogen chloride, iron-sulphur compounds, acetic acid, acetic anhydride, mesityl oxide, nitric acid, sulphuric acid, strong acids, vinyl acetate, cellulose nitrate.

Acrylic acid

Risk of explosion on contact with: oxidising agents, oxygen, peroxides. May polymerise on contact with: alkaline hydroxides, amines, ammonia, sulphuric acid. Forms explosive mixtures with: hot air.

10.4. Conditions to avoid

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

Ethanolamine

Avoid exposure to: air, sources of heat.

Acrylic acid

Avoid exposure to: light, sources of heat, naked flames. Avoid contact with: oxygen.

Temperature above 60 °C. Direct exposure to sunlight. Contact with heat sources.

10.5. Incompatible materials

Ethanolamine

Incompatible with: iron, strong acids, strong oxidants.

Acrylic acid

Incompatible with: peroxides, oxidising substances, strong acids, strong bases, amines, iron salts, oleum, chlorosulphuric acid.

Strong bases. Peroxides. Free radical.

10.6. Hazardous decomposition products

Ethanolamine

May develop: nitric oxide, carbon oxides.

Hazardous polymerization can occur when heated or exposed to direct sunlight.

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

SECTION 11. Toxicological information ... / >>

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: | Not classified (no significant component) |
| LD50 (Dermal) of the mixture: | Not classified (no significant component) |

| | |
|-------------------|-------------------|
| Ethanol | |
| LD50 (Oral) | 10470 mg/kg Rat |
| LC50 (Inhalation) | 124,7 mg/l/4h Rat |

| | |
|---------------------------|-------------------|
| 2-(2-Butoxyethoxy)Ethanol | |
| LD50 (Oral) | 2410 mg/kg Rat |
| LD50 (Dermal) | 2764 mg/kg Rabbit |

| | |
|-------------------|----------------|
| 2-butoxyethanol | |
| LD50 (Oral) | 1746 mg/kg Rat |
| LD50 (Dermal) | 6411 mg/kg Pig |
| LC50 (Inhalation) | 450 ppm Rat |

| | |
|-------------------|---------------------|
| Butanone | |
| LD50 (Oral) | 2193 mg/kg Rat |
| LD50 (Dermal) | > 5000 mg/kg Rabbit |
| LC50 (Inhalation) | 4000 ppm Rat |

| | |
|-------------------|---------------------|
| Acrylic acid | |
| LD50 (Oral) | 151 mg/kg Rat |
| LD50 (Dermal) | > 2000 mg/kg Rabbit |
| LC50 (Inhalation) | > 5,1 mg/l/4h Rat |

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION

May produce an allergic reaction.

Contains:

Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)
1,2-Benzisothiazol-3(2H)-one

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



SECTION 11. Toxicological information ... / >>

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

| | |
|-----------------------------------|---------------------------------------|
| Ethanol | |
| LC50 - for Fish | 15,3 g/l/96h Fish |
| EC10 for Algae / Aquatic Plants | 675 mg/l/96h Alga |
| 2-(2-Butoxyethoxy)Ethanol | |
| LC50 - for Fish | 100 mg/l/96h Fish |
| EC50 - for Crustacea | 100 mg/l/48h Algae |
| 2-butoxyethanol | |
| LC50 - for Fish | 1474 mg/l/96h Fish |
| EC50 - for Crustacea | 1550 mg/l/48h Daphnia |
| EC50 - for Algae / Aquatic Plants | 911 mg/l/72h Algae |
| Butanone | |
| LC50 - for Fish | 2993 mg/l/96h Fish |
| EC50 - for Crustacea | 308 mg/l/48h Daphnia |
| Acrylic acid | |
| LC50 - for Fish | 315 mg/l/96h Leuciscus idus melanotus |
| EC50 - for Crustacea | 765 mg/l/48h Daphnia magna |
| EC50 - for Algae / Aquatic Plants | 118 mg/l/72h Chlorococcales |

12.2. Persistence and degradability

| | |
|---------------------------|-------------------|
| Ethanol | |
| Rapidly degradable | |
| 2-(2-Butoxyethoxy)Ethanol | |
| Rapidly degradable | |
| 2-butoxyethanol | |
| Rapidly degradable | |
| Butanone | |
| Rapidly degradable | |
| Ethanolamine | |
| Solubility in water | 1000 - 10000 mg/l |
| Rapidly degradable | |
| Acrylic acid | |
| Solubility in water | 1000000 mg/l |
| Rapidly degradable | |

12.3. Bioaccumulative potential

Ethanol
Little bioaccumulative.

**SECTION 12. Ecological information ... / >>**

| | |
|--|-------|
| Ethanolamine | |
| Partition coefficient: n-octanol/water | -2,3 |
| Acrylic acid | |
| Partition coefficient: n-octanol/water | 0,46 |
| BCF | 0,491 |

12.4. Mobility in soil

Ethanol
Evaporates quickly.

| | |
|-----------------------------------|---------|
| Ethanolamine | |
| Partition coefficient: soil/water | -0,5646 |
| Acrylic acid | |
| Partition coefficient: soil/water | 0,78 |

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. Neat product residues should be considered special non-hazardous waste.
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

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 16. Other information ... / >>****EUH066**
EUH210Repeated exposure may cause skin dryness or cracking.
Safety data sheet available on request.**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

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- 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



SECTION 16. Other information ... / >>

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.

Product's classification is based on the calculation methods set out in Annex I of the CLP Regulation, unless otherwise indicated in sections 11 and 12.

The data for evaluation of chemical-physical properties are reported in section 9.

Changes to previous review:

The following sections were modified:

01 / 02 / 03 / 05 / 07 / 08 / 09 / 11 / 12 / 13 / 15 / 16.

Changed TLVs in section 8.1 for following countries:

BGR, CZE, DEU, HUN, LTU, SVN, FIN, GBR, GRC, HRV, ITA, NLD, POL, PRT, ROU, SVK,