

Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 2020/878

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

1.1. Product identifier

Code: P10965
Product name: ResinFIP POLYBOND F 210 COMP.B
UFI : 8331-V0JM-100Y-8R2U

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

Intended use: Hardener for polyester resin

1.3. Details of the supplier of the safety data sheet

Name: Licata S.p.A.
Full address: Via dei Mille 32
District and Country: 00185 Roma (RM)
Italia
Tel.: +39 0922 856088
Fax: +39 0922 831427
e-mail address of the competent person responsible for the Safety Data Sheet: controllo-qualita@licataspa.it

1.4. Emergency telephone number

For urgent inquiries refer to:
NHS111in England: 111
NHS24in Scotland: 111
NHS Direct in Wales: 111 or 0845 4647
In an emergency, if the patient has collapsed or is not breathing properly, call 999

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.

Hazard classification and indication:

| | | |
|--|------|---|
| Eye irritation, category 2 | H319 | Causes serious eye irritation. |
| Skin sensitization, category 1 | H317 | May cause an allergic skin reaction. |
| Hazardous to the aquatic environment, acute toxicity, category 1 | H400 | Very toxic to aquatic life. |
| Hazardous to the aquatic environment, chronic toxicity, category 1 | H410 | Very toxic 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:



Signal words: Warning

SECTION 2. Hazards identification ... / >>

Hazard statements:

| | |
|-------------|---|
| H319 | Causes serious eye irritation. |
| H317 | May cause an allergic skin reaction. |
| H410 | Very toxic to aquatic life with long lasting effects. |

Precautionary statements:

| | |
|------------------|--|
| P280 | Wear protective gloves / eye protection / face protection. |
| P273 | Avoid release to the environment. |
| P391 | Collect spillage. |
| P261 | Avoid breathing dust / fume / gas / mist / vapours / spray. |
| P333+P313 | If skin irritation or rash occurs: Get medical advice / attention. |
| P337+P313 | If eye irritation persists: Get medical advice / attention. |

Contains: Dibenzoyl peroxide

The product is classified both in acute and long-term aquatic hazard categories: it is possible to use only hazard statement H410 on the label.

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

3.2. Mixtures

Contains:

| Identification | x = Conc. % | Classification (EC) 1272/2008 (CLP) |
|----------------------------------|--------------------|---|
| Dibenzoyl peroxide | | |
| INDEX 617-008-00-0 | $37,5 \leq x < 40$ | Org. Perox B H241, Eye Irrit. 2 H319, Skin Sens. 1 H317, Aquatic Acute 1 H400 M=10, Aquatic Chronic 1 H410 M=1, Classification note according to Annex VI to the CLP Regulation: T |
| EC 202-327-6 | | |
| CAS 94-36-0 | | |
| REACH Reg. 01-2119511472-50 | | |
| ETHYLENE GLYCOL | | |
| INDEX 603-027-00-1 | $7 \leq x < 8$ | Acute Tox. 4 H302, STOT RE 2 H373 |
| EC 203-473-3 | | ATE Oral: 500 mg/kg |
| CAS 107-21-1 | | |
| REACH Reg. 01-2119456816-28-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

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 immediately all contaminated clothing. Wash immediately and thoroughly with running water (and soap if possible). Get medical advice/attention. 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. 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

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

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 skin irritation or rash occurs: Get medical advice / attention.

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 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.

| | | | |
|---|----------------|--|----|
| Licata S.p.A. | | Revision nr.7 Dated 12/02/2026 Printed on 12/02/2026 Page n. 4 / 14 Replaced revision:6 (Dated 03/02/2025) | EN |
| P10965 - ResinFIP POLYBOND F 210 COMP.B | | | |
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| SECTION 7. Handling and storage | | | |
| 7.1. Precautions for safe handling | | | |
| Ensure that there is an adequate earthing system for the equipment and personnel. Avoid contact with eyes and skin. Do not breathe powders, vapours or mists. Do not eat, drink or smoke during use. Wash hands after use. Avoid leakage of the product into the environment. | | | |
| 7.2. Conditions for safe storage, including any incompatibilities | | | |
| Store only in the original container. Store in a ventilated and dry place, far away from sources of ignition. Keep containers well sealed. Keep the product in clearly labelled containers. Avoid overheating. Avoid violent blows. 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: | | | |
| DEU | Deutschland | WirkungDosisNOAELMAK-und BAT-Werte-Liste 2024 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe | |
| ESP | España | Límites de exposición profesional para agentes químicos en España 2024 | |
| FRA | France | Valeurs limites d'exposition professionnelle aux agents chimiques en FranceDécret n° 2021-1849 du 28 décembre 2021 | |
| HRV | Hrvatska | PRAVILNIK O IZMJENAMA I DOPUNAMA PRAVILNIKA O ZAŠTITI RADNIKA OD IZLOŽENOSTI OPASNIM KEMIKAJIJAMA NA RADU, GRANIČNIM VRIJEDNOSTIMA IZLOŽENOSTI I BIOLOŠKIM GRANIČNIM VRIJEDNOSTIMA | |
| ITA | Italia | Decreto Legislativo 9 Aprile 2008, n.81 | |
| SVN | Slovenija | Pravilnik o varovanju delavcev pred tveganji zaradi izpostavljenosti rakotvornim, mutagenim ali reprotoksičnim snovem pri delu. Ljubljana, četrtek 4. 4. 2024 | |
| GBR | United Kingdom | EH40/2005 Workplace exposure limits (Fourth Edition 2020) | |
| EU | OEL EU | 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. | |
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SECTION 8. Exposure controls/personal protection ... / >>

ETHYLENE GLYCOL

Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|----------|---------|--------|-----|------------|-----|------------------------|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| AGW | DEU | 26 | 10 | 52 | 20 | SKIN |
| MAK | DEU | 26 | 10 | 52 | 20 | SKIN |
| VLA | ESP | 52 | 20 | 104 | 40 | SKIN |
| VLEP | FRA | 52 | 20 | 104 | 40 | SKIN |
| GVI/KGVI | HRV | 52 | 20 | 104 | 40 | SKIN |
| VLEP | ITA | 52 | 20 | 104 | 40 | SKIN |
| MV | SVN | 52 | 20 | 104 | 40 | SKIN |
| WEL | GBR | 52 | 20 | 104 | 40 | SKIN |
| OEL | EU | 52 | 20 | 104 | 40 | SKIN |

Predicted no-effect concentration - PNEC

| | | |
|--|-------|-------|
| Normal value in fresh water | 10 | mg/l |
| Normal value in marine water | 1 | mg/l |
| Normal value for fresh water sediment | 37 | mg/kg |
| Normal value for marine water sediment | 3,7 | mg/kg |
| Normal value of STP microorganisms | 199,5 | mg/l |
| Normal value for the terrestrial compartment | 1,53 | mg/kg |

Health - Derived no-effect level - DNEL / DMEL

| Route of exposure | Effects on consumers | | Chronic local | Chronic systemic | Effects on workers | | | |
|-------------------|----------------------|----------------|---------------|------------------|--------------------|----------------|---------------|----------------------|
| | Acute local | Acute systemic | | | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Inhalation | | | | 7 mg/m3 | | | | 35 mg/m3 |
| Skin | | | | 53 mg/kg bw/d | | | | 106 mg/kg bw/d |

Dibenzoyl peroxide

Predicted no-effect concentration - PNEC

| | | |
|--|---------|---------|
| Normal value in fresh water | 0,00002 | mg/l |
| Normal value in marine water | 0,00000 | mg/l |
| | 2 | |
| Normal value for fresh water sediment | 0,0127 | mg/kg/d |
| Normal value for marine water sediment | 0,00127 | mg/kg/d |
| Normal value for water, intermittent release | 0,00060 | mg/l |
| | 2 | |
| Normal value of STP microorganisms | 0,35 | mg/l |
| Normal value for the terrestrial compartment | 0,0025 | mg/kg/d |

Health - Derived no-effect level - DNEL / DMEL

| Route of exposure | Effects on consumers | | Chronic local | Chronic systemic | Effects on workers | | | |
|-------------------|----------------------|----------------|---------------|------------------|--------------------|----------------|---------------|-----------------------|
| | Acute local | Acute systemic | | | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Oral | | | | 2 mg/kg bw/d | | | | |
| Inhalation | | | | | | | | 39 mg/m3 |
| Skin | | | | | | | | 13,3 mg/kg bw/d |

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.

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

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

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 | |
| Colour | not available | |
| Odour | not available | |
| Melting point / freezing point | not available | |
| Initial boiling point | not available | |
| Flammability | not available | |
| Lower explosive limit | not available | |
| Upper explosive limit | not available | |
| Flash point | not available | |
| Auto-ignition temperature | not available | |
| Decomposition temperature | not available | |
| pH | 6 | |
| Kinematic viscosity | not available | |
| Solubility | immiscible with water | |
| Partition coefficient: n-octanol/water | not available | |
| Vapour pressure | not available | |
| Density and/or relative density | 1600 g/dm ³ | |
| Relative vapour density | not available | |
| Particle characteristics | not applicable | |

Supplementary information for nanoforms

MINEMA 1-2-44

Shape 1:

D50

5

µm

Crystallinity

Crystalline structure 1:

Surface functionalisation / treatment

Surface treatments 1:

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

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

VOC (Directive 2010/75/EU) 34,68 % - 554,80 g/litre

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

In the air absorbs moisture. Decomposes at temperatures above 200°C/392°F.

PROPYLENE GLYCOL

Hygroscopic. Stable in normal conditions of use and storage.

At high temperatures it tends to oxidate to form propionaldehyde and lactic and acetic acid.

10.2. Chemical stability

The product is stable if stored in original containers at temperatures lower than the self accelerated decomposition temperature (SADT).

Dibenzoyl peroxide

Decomposes on contact with: light.

10.3. Possibility of hazardous reactions**ETHYLENE GLYCOL**

Risk of explosion on contact with: perchloric acid. May react dangerously with: chlorosulphuric acid, sodium hydroxide, sulphuric acid, phosphorus pentasulphide, chromium (III) oxide, chromyl chloride, potassium perchlorate, potassium dichromate, sodium peroxide, aluminium. Forms explosive mixtures with: air.

Dibenzoyl peroxide

Develops heat on contact with: carbon.

Risk of explosion on contact with: alcohols, amines, reducing agents, alkaline substances, strong acids, polymerization activators, hydrides, chloroform.

PROPYLENE GLYCOL

May react dangerously with: acid chlorides, acid anhydrides, oxidising agents.

10.4. Conditions to avoid

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition. Avoid transferring into containers that may have been contaminated with other substances. Avoid storing close to inflammable or combustible products.

ETHYLENE GLYCOL

Avoid exposure to: sources of heat, naked flames.

DIOTILADIPATO S

Excessive heat

10.5. Incompatible materials

Strong reducing or oxidising agents, strong acids or alkalis, hot material.

DIOTILADIPATO S

Materials to avoid: oxidizing agents, strong acids

10.6. Hazardous decomposition products

Thermal decomposition can lead to the formation of explosive peroxides or other potentially hazardous substances.

ETHYLENE GLYCOL

May develop: hydroxyacetaldehyde, glyoxal, acetaldehyde, methane, carbon monoxide, hydrogen.

PROPYLENE GLYCOL

May develop: carbon oxides.

DIOTILADIPATO S

Carbon oxides

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.

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

ETHYLENE GLYCOL

WORKERS: inhalation; contact with the skin.

POPULATION: inhalation of ambient air; contact with the skin of products containing the substance.

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

ETHYLENE GLYCOL

Ingestion initially stimulates the central nervous system; later replaced by a phase of depression. There may be kidney damage, with anuria and uremia. Over-exposure symptoms are: vomiting, drowsiness, difficulty in breathing, convulsions. The lethal dose for humans is approx. 1.4 ml/kg.

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)

Dibenzoyl peroxide

LD50 (Oral):

> 2000 mg/kg Ratto

LC50 (Inhalation mists/powders):

> 24,3 mg/l/4h Ratto

DIMETHYL PHTHALATE

LD50 (Dermal):

> 12000 mg/kg Rabbit

LD50 (Oral):

8200 mg/kg Rat

LC50 (Inhalation vapours):

> 10,4 mg/l Rat

ETHYLENE GLYCOL

LD50 (Dermal):

3500 mg/kg Rat

LD50 (Oral):

7712 mg/kg Rat

ATE (Oral):

500 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)

LC50 (Inhalation vapours):

2,5 mg/l Rat

DIOTILADIPATO S

LD50 (Oral):

> 20000 mg/kg Rat

LC50 (Inhalation vapours):

> 5,7 mg/l/4h Rat

PROPYLENE GLYCOL

LD50 (Dermal):

> 2000 mg/kg Ratto

LD50 (Oral):

> 20000 mg/kg Ratto

LC50 (Inhalation mists/powders):

317,042 mg/l/2h Coniglio

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

MINEMA 1-2-44

According to the classification criteria of the European Union, the product is not considered a skin irritant.

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

SECTION 11. Toxicological information ... / >>

MINEMA 1-2-44

According to the classification criteria of the European Union, the product is not considered to be an eye irritant.

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

ETHYLENE GLYCOL

Available studies have shown no carcinogenic potential. In a carcinogenicity study lasting two years, carried out by the US National Toxicology Program (NTP), in which ethylene glycol was administered in the feed, "no evidence of carcinogenic activity" in male and female B6C3F1 mice was observed (NTP, 1993).

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.

MINEMA 1-2-44

The substance/mixture does not contain components considered to have endocrine disrupting properties according to Article 57(f) of REACH or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 12. Ecological information

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

12.1. Toxicity

Dibenzoyl peroxide

LC50 - for Fish > 0,0602 mg/l/96h

EC50 - for Crustacea > 0,11 mg/l/48h

EC50 - for Algae / Aquatic Plants > 0,0711 mg/l/72h

EC10 for Crustacea > 0,001 mg/l/28d

Chronic NOEC for Fish > 0,0316 mg/l

Chronic NOEC for Algae / Aquatic Plants > 0,02 mg/l

DIMETHYL PHTHALATE

LC50 - for Fish 24 mg/l/96h Trota iridea

EC50 - for Crustacea 33 mg/l/48h Daphnia magna

EC50 - for Algae / Aquatic Plants > 100 mg/l/72h Pseudokirchneriella subcapitata

EC10 for Algae / Aquatic Plants > 100 mg/l/72h Pseudokirchneriella subcapitata

Chronic NOEC for Fish 11 mg/l Trota iridea

Chronic NOEC for Crustacea > 10 mg/l Daphnia magna

P10965 - ResinFIP POLYBOND F 210 COMP.B**SECTION 12. Ecological information** ... / >>

| | |
|---|---------------------------------|
| ETHYLENE GLYCOL | |
| LC50 - for Fish | 72860 mg/l/96h |
| EC50 - for Crustacea | > 100 mg/l/48h |
| Chronic NOEC for Fish | 15380 mg/l |
| Chronic NOEC for Crustacea | 8590 mg/l |
| Chronic NOEC for Algae / Aquatic Plants | 100 mg/l |
| DIOTILADIPATO S | |
| LC50 - for Fish | > 0,78 mg/l/96h |
| EC50 - for Crustacea | > 500 mg/l/48h |
| EC50 - for Algae / Aquatic Plants | > 500 mg/l/72h |
| PROPYLENE GLYCOL | |
| LC50 - for Fish | 40613 mg/l/96h Trota iridea |
| EC50 - for Crustacea | 18340 mg/l/48h pulce d'acqua |
| EC50 - for Algae / Aquatic Plants | 19000 mg/l/72h alghe cloroficee |
| Chronic NOEC for Crustacea | 13020 mg/l pulce d'acqua |

12.2. Persistence and degradability

| | |
|--|------------------------|
| Dibenzoyl peroxide | |
| Rapidly degradable | 71% in acqua 28 giorni |
| DIMETHYL PHTHALATE | |
| Solubility in water | 4000 mg/l |
| Rapidly degradable | 100% |
| MINEMA 1-2-44 | |
| Degradability: information not available | Sostanza inorganica |
| ETHYLENE GLYCOL | |
| Solubility in water | 1000000 mg/l |
| Rapidly degradable | 100% |
| DIOTILADIPATO S | |
| Degradability: information not available | |
| PROPYLENE GLYCOL | |
| Rapidly degradable | 81% |

12.3. Bioaccumulative potential

| | |
|--|--------------|
| Dibenzoyl peroxide | |
| Partition coefficient: n-octanol/water | 3,2 Log Kow |
| DIMETHYL PHTHALATE | |
| Partition coefficient: n-octanol/water | 1,54 Log Kow |
| BCF | 0,00874 |
| ETHYLENE GLYCOL | |
| Partition coefficient: n-octanol/water | -1,36 |
| DIOTILADIPATO S | |
| Partition coefficient: n-octanol/water | 8,1 Log Kow |
| BCF | 27 |
| PROPYLENE GLYCOL | |
| Partition coefficient: n-octanol/water | -1,07 |
| BCF | 0,09 |

12.4. Mobility in soil

| | |
|-----------------------------------|------|
| PROPYLENE GLYCOL | |
| Partition coefficient: soil/water | 0,46 |

SECTION 12. Ecological information ... / >>**12.5. Results of PBT and vPvB assessment**

MINEMA 1-2-44

This substance/mixture does not contain components considered to be both persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at concentrations of 0.1% or higher.

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

MINEMA 1-2-44

The substance/mixture does not contain components considered to have endocrine disrupting properties according to Article 57(f) of REACH or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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

MINEMA 1-2-44

This product has no known ecotoxicological effects.

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.

Waste transportation may be subject to ADR restrictions.

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.

MINEMA 1-2-44

Take non-recyclable solutions and surplus to an authorized waste disposal company.

SECTION 14. Transport information**14.1. UN number or ID number**

ADR / RID, IMDG, IATA: UN 3082

ADR / RID: In accordance with Special Provision 375, this product, when is packed in receptacles of a capacity \leq 5Kg or 5L, is not submitted to ADR provisions.

IMDG: In accordance with Section 2.10.2.7 of IMDG Code, this product, when is packed in receptacles of a capacity \leq 5Kg or 5L, is not submitted to IMDG Code provisions.

IATA: In accordance with SP A197, this product, when is packed in receptacles of a capacity \leq 5Kg or 5L, is not submitted to IATA dangerous goods regulations.

14.2. UN proper shipping name

ADR / RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Dibenzoyl peroxide)

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Dibenzoyl peroxide)

IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Dibenzoyl peroxide)

SECTION 14. Transport information ... / >>

14.3. Transport hazard class(es)

ADR / RID: Class: 9 Label: 9

IMDG: Class: 9 Label: 9

IATA: Class: 9 Label: 9



14.4. Packing group

ADR / RID, IMDG, IATA: III

14.5. Environmental hazards

ADR / RID: Environmentally Hazardous

IMDG: Marine Pollutant

IATA: Environmentally Hazardous



14.6. Special precautions for user

| | | | |
|------------|--|--------------------------|------------------------------|
| ADR / RID: | HIN - Kemler: 90 | Limited Quantities: 5 lt | Tunnel restriction code: (-) |
| | Special provision: 274, 335, 375, 601, 650 | | |
| IMDG: | EMS: F-A, S-F | Limited Quantities: 5 lt | |
| IATA: | Cargo: | Maximum quantity: 450 L | Packaging instructions: 964 |
| | Passengers: | Maximum quantity: 450 L | Packaging instructions: 964 |
| | Special provision: | A97, A158, A197, A215 | |

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: E1

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

Product

Point 3

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%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

SECTION 15. Regulatory information ... / >>

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.

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:

| | |
|--------------------------|--|
| Org. Perox B | Organic peroxide, type B |
| Acute Tox. 4 | Acute toxicity, category 4 |
| STOT RE 2 | Specific target organ toxicity - repeated exposure, category 2 |
| Eye Irrit. 2 | Eye irritation, category 2 |
| Skin Sens. 1 | Skin sensitization, category 1 |
| Aquatic Acute 1 | Hazardous to the aquatic environment, acute toxicity, category 1 |
| Aquatic Chronic 1 | Hazardous to the aquatic environment, chronic toxicity, category 1 |
| H241 | Heating may cause a fire or explosion. |
| H302 | Harmful if swallowed. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H319 | Causes serious eye irritation. |
| H317 | May cause an allergic skin reaction. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

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).

SECTION 16. Other information ... / >>

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)
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
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25. Delegated Regulation (UE) 2023/1435 (XX Atp. CLP)
26. Delegated Regulation (UE) 2024/197 (XXI Atp. CLP)
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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 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:

01 / 02 / 03 / 08 / 09 / 10 / 11 / 12 / 13 / 14 / 16.