# Safety data sheet
# according to Regulation (EC) No 1907/2006, Annex II

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

## Arti-Spot Frühkontaktindikator BK 86

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

**Relevant identified uses of the substance or mixture:**
Indicator solution
Paint

**Uses advised against:**
No information available at present.

### 1.3 Details of the supplier of the safety data sheet

Dr. Jean Bausch GmbH & Co. KG, Oskar-Schindler-Str. 4, D-50769 Köln
Telephone +49 (0)221-70936-0, Fax +49 (0)221-70936-66
info@BauschDental.de, http://BauschDental.de

E-mail address of the competent person: info@chemical-check.de, k.schnurbusch@chemical-check.de

### 1.4 Emergency telephone

**Advisory office in case of poisoning:**
+49 30 19240 (D-13437 Berlin, 24 hour)

**Telephone number of the company in case of emergencies:**
Tel.: ---

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

### 2.1.1 Classification according to Regulation (EC) 1272/2008 (CLP)

| Hazard class | Hazard category | Hazard statement |
|---|---|---|
| Flam. Liq. | 1 | H224-Extremely flammable liquid and vapour. |
| Eye Irrit. | 2 | H319-Causes serious eye irritation. |
| STOT SE | 3 | H336-May cause drowsiness or dizziness. |

### 2.1.2 Classification according to Directives 67/548/EEC and 1999/45/EC (including amendments).

F+, Extremely flammable, R12
R19
Xi, Irritant, R36
R66
R67

### 2.2 Label elements

### 2.2.1 Labeling according to Regulation (EC) 1272/2008 (CLP)

Danger

**Hazard statement**

H224-Extremely flammable liquid and vapour. H319-Causes serious eye irritation. H336-May cause drowsiness or dizziness.

**Prevention**

P210-Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P233-Keep container tightly closed. P261-Avoid breathing vapour or spray. P280-Wear protective gloves/clothing and eye/face protection.

**Response**

P305+P351+P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313-If eye irritation persists: Get medical advice/attention.

**Storage**

P403+P235-Store in a well-ventilated place. Keep cool.

EUH019-May form explosive peroxides.
EUH066-Repeated exposure may cause skin dryness or cracking.

Ethyl acetate
diethyl ether

### 2.3 Other hazards

The mixture contains no vPvB substance (vPvB = very persistent, very bioaccumulative).
The mixture contains no PBT substance (PBT = persistent, bioaccumulative, toxic).

## SECTION 3: Composition/information on ingredients

### 3.1 Substance

n.a.

### 3.2 Mixture

| **Ethyl acetate** | |
|---|---|
| **Registration number (ECHA)** | 01-2119475103-46-XXXX |
| **Index** | 607-022-00-5 |
| **EINECS, ELINCS** | 205-500-4 |
| **content %** | 20-30 |
| **Symbol** | F/Xi |
| **R-phrases** | 11-36-66-67 |
| **Classification categories / Indications of danger** | Highly flammable, Irritant |
| **Hazard class/Hazard category** | **Hazard statement** |
| Flam. Liq./2<br>Eye Irrit./2<br>STOT SE/3 | H225<br>H319<br>H336 |

| **diethyl ether** | Substance for which an EU exposure limit value applies. |
|---|---|
| **Registration number (ECHA)** | - |
| **Index** | 603-022-00-4 |
| **EINECS, ELINCS** | 200-467-2 |
| **content %** | 10-<25 |
| **Symbol** | F+/Xn |
| **R-phrases** | 12-19-22-66-67 |
| **Classification categories / Indications of danger** | Extremely flammable, Harmful |
| **Hazard class/Hazard category** | **Hazard statement** |
| Flam. Liq./1<br>Acute Tox./4<br>STOT SE/3 | H224<br>H302<br>H336 |

For the text of the R-phrases / H-phrases and classification codes (GHS/CLP), see Section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

Never pour anything into the mouth of an unconscious person!

### Inhalation

Remove person from danger area.
Supply person with fresh air and consult doctor according to symptoms.
If the person is unconscious, place in a stable side position and consult a doctor.

### Skin contact

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.
Unsuitable cleaning product:
Solvent
Thinners

### Eye contact
Remove contact lenses.
Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

### Ingestion
Rinse the mouth thoroughly with water.
Do not induce vomiting - give copious water to drink. Consult doctor immediately.
Danger of aspiration

### 4.2 Most important symptoms and effects, both acute and delayed
Where relevant delayed occuring symptomes and effects will be found in section 11. or at the exposure routes under section 4.1.
After resorption:
drowsiness
Dizziness
Euphoria
annoyance
Cramps
Narcotic effect.

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

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media
### Suitable extinguishing media
CO2
Extinction powder
Water jet spray
Alcohol resistant foam

### Unsuitable extinguishing media
High volume water jet

### 5.2 Special hazards arising from the substance or mixture
In case of fire the following can develop:
Oxides of carbon
Oxides of nitrogen
Toxic pyrolysis products.
Explosive vapour/air mixture
Dangerous vapours heavier than air.

### 5.3 Advice for firefighters
In case of fire and/or explosion do not breathe fumes.
Protective respirator with independent air supply.
According to size of fire
Full protection, if necessary
Cool container at risk with water.
Dispose of contaminated extinction water according to official regulations.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures
Remove possible causes of ignition - do not smoke.
Ensure sufficient supply of air.
Avoid inhalation, and contact with eyes or skin.
If applicable, caution - risk of slipping

### 6.2 Environmental precautions
If leakage occurs, dam up.
Prevent surface and ground-water infiltration, as well as ground penetration.
Prevent from entering drainage system.
If accidental entry into drainage system occurs, inform responsible authorities.

### 6.3 Methods and material for containment and cleaning up
Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth) and dispose of according to Section 13.

Use no flammable substances.
Fill the absorbed material into lockable containers.
Keep moist.
Do not let the solution dry up.
Flush residue using copious water.

### 6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

## SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

### 7.1 Precautions for safe handling

Avoid inhalation of the vapours.
Ensure good ventilation.
Keep away from sources of ignition - Do not smoke.
Take measures against electrostatic charging, if appropriate.
Avoid contact with eyes or skin.
Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.
Observe directions on label and instructions for use.
Use working methods according to operating instructions.
General hygiene measures for the handling of chemicals are applicable.
Wash hands before breaks and at end of work.
Keep away from food, drink and animal feedingstuffs.
Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

### 7.2 Conditions for safe storage, including any incompatibilities

Not to be stored in gangways or stair wells.
Store product closed and only in original packing.
Do not store with flammable or self-igniting materials.
Store in a well-ventilated place.
Protect from direct sunlight and warming.
Store at room temperature.
Do not store over 30°C.
Observe special storage conditions (in Germany, e.g., in accordance with the regulations in the "Betriebssicherheitsverordnung").

### 7.3 Specific end use(s)

No information available at present.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

| GB | **Chemical Name** | Ethyl acetate | Content %:20-30 |
|---|---|---|---|
| WEL-TWA: 200 ppm | WEL-STEL: 400 ppm | --- | |
| BMGV: --- | Other information: --- | | |

| GB | **Chemical Name** | diethyl ether | Content %:10-<25 |
|---|---|---|---|
| WEL-TWA: 100 ppm (310 mg/m3) (WEL), 100 ppm (308 mg/m3) (EC) | WEL-STEL: 200 ppm (620 mg/m3) (WEL), 200 ppm (616 mg/m3) (EC) | --- | |
| BMGV: --- | Other information: --- | | |

| GB | **Chemical Name** | Ethanol | Content %: |
|---|---|---|---|
| WEL-TWA: 1000 ppm (1920 mg/m3) | WEL-STEL: --- | --- | |
| BMGV: --- | Other information: --- | | |

| GB | **Chemical Name** | Glycerine | Content %: |
|---|---|---|---|
| WEL-TWA: 10 mg/m3 (mist) | WEL-STEL: --- | --- | |
| BMGV: --- | Other information: --- | | |

GB WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.
** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

| Ethanol | | | | | | |
|---|---|---|---|---|---|---|
| **Use-Area** | **Exposure-Route** | **Exposure-Pattern** | **Descriptor** | **Value** | **Unit** | **Note** |
| Worker | Human - inhalation | Short term, local effects | DNEL (Derived No Effect Level) | 1900 | mg/m3 | |
| Worker | Human - inhalation | Long term, systemic effects | DNEL (Derived No Effect Level) | 950 | mg/m3 | |
| Worker | Human - dermal | Long term, systemic effects | DNEL (Derived No Effect Level) | 343 | mg/kg bw/d | |
| Consumer | Human - inhalation | Short term, local effects | DNEL (Derived No Effect Level) | 950 | mg/m3 | |
| Consumer | Human - dermal | Short term, local effects | DNEL (Derived No Effect Level) | 950 | mg/m3 | |
| Consumer | Human - inhalation | Long term, systemic effects | DNEL (Derived No Effect Level) | 114 | mg/m3 | |
| Consumer | Human - oral | Long term, systemic effects | DNEL (Derived No Effect Level) | 87 | mg/kg | |
| Consumer | Human - dermal | Long term, systemic effects | DNEL (Derived No Effect Level) | 206 | mg/kg bw/d | |
| | Environment - freshwater | | PNEC (Predicted No Effect Concentration) | 0,96 | mg/l | |
| | Environment - marine | | PNEC (Predicted No Effect Concentration) | 0,79 | mg/l | |
| | Environment - water, sporadic (intermittent) release | | PNEC (Predicted No Effect Concentration) | 2,75 | mg/l | |
| | Environment - sewage treatment plant | | PNEC (Predicted No Effect Concentration) | 580 | mg/l | |
| | Environment - sediment, freshwater | | DNEL (Derived No Effect Level) | 3,6 | mg/kg dry weight | |
| | Environment - soil | | DNEL (Derived No Effect Level) | 0,63 | mg/kg dry weight | |
| | Environment - oral (feed) | | PNEC (Predicted No Effect Concentration) | 0,72 | mg/kg feed | |

## 8.2 Exposure controls
## 8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.
If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.
Applies only if maximum permissible exposure values are listed here.

## 8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.
Wash hands before breaks and at end of work.
Keep away from food, drink and animal feedingstuffs.
Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:
Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection:
Solvent resistant protective gloves (EN 374).
If applicable
Safety gloves made of butyl (EN 374)
Protective Neopren gloves (EN 374).
Protective nitrile gloves (EN 374)
Protective hand cream recommended.

Skin protection - Other:
Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments)

Respiratory protection:
Normally not necessary.
If OES or MEL is exceeded.
Gas mask filter A (EN 14387), code colour brown

Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:
If applicable, these are included in the individual protective measures (eye/face protection, skin protection, respiratory protection).

Additional information on hand protection - No tests have been performed.
In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.
Selection of materials derived from glove manufacturer's indications.
Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.
Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.
In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.
The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

### 8.2.3 Environmental exposure controls
No information available at present.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | |
|---|---|
| Physical state: | Liquid |
| Colour: | Red |
| Odour: | Alcoholic, Characteristic |
| Odour threshold: | Not determined |
| pH-value: | Not determined |
| Melting point/freezing point: | Not determined |
| Initial boiling point and boiling range: | Not determined |
| Flash point: | -28,5 °C (ISO 1523 (Rapid Equilibrium, closed cup, RECC)) |
| Evaporation rate: | Not determined |
| Flammability (solid, gas): | 200 °C (Ignition temperature ) |
| Lower explosive limit: | 2,1 Vol-% |
| Upper explosive limit: | 13,5 Vol-% |
| Vapour pressure: | Not determined |
| Vapour density (air = 1): | Not determined |
| Density: | 0,902 g/ml |
| Bulk density: | Not determined |
| Solubility(ies): | Not determined |
| Water solubility: | Insoluble |
| Partition coefficient (n-octanol/water): | Not determined |
| Auto-ignition temperature: | Not determined |
| Decomposition temperature: | Not determined |
| Viscosity: | Not determined |
| Explosive properties: | Not determined |
| Oxidising properties: | Not determined |

### 9.2 Other information

| | |
|---|---|
| Miscibility: | Not determined |
| Fat solubility / solvent: | Not determined |
| Conductivity: | Not determined |
| Surface tension: | Not determined |
| Solvents content: | Not determined |

## SECTION 10: Stability and reactivity

### 10.1 Reactivity
See also Subsection 10.4 to 10.6.
Can form explosive peroxides.

### 10.2 Chemical stability
See also Subsection 10.4 to 10.6.
Explosive when dry.

### 10.3 Possibility of hazardous reactions
See also Subsection 10.4 to 10.6.
Possible build up of explosive/highly flammable vapour/air mixture.

### 10.4 Conditions to avoid
See also section 7.

Heating, open flame, ignition sources
Electrostatic charge
Protect from direct sunlight.
Product is light sensitive.

### 10.5 Incompatible materials

Avoid contact with strong oxidizing agents.
Avoid contact with strong acids.
Alkali metals

### 10.6 Hazardous decomposition products

See also Subsection 10.4 to 10.6.
No decomposition when used as directed.

## SECTION 11: Toxicological information

The product was not tested.
Classification according to calculation procedure.

**Arti-Spot Frühkontaktindikator BK 86**

| Toxicity/effect | Endpoint | Value | Unit | Organism | Test method | Notes |
|---|---|---|---|---|---|---|
| Acute toxicity, by oral route: | ATE | >5000 | mg/kg | | | calculated value |
| Acute toxicity, by dermal route: | | | | | | n.d.a. |
| Acute toxicity, by inhalation: | | | | | | n.d.a. |
| Skin corrosion/irritation: | | | | | | n.d.a. |
| Serious eye damage/irritation: | | | | | | n.d.a. |
| Respiratory or skin sensitisation: | | | | | | n.d.a. |
| Germ cell mutagenicity: | | | | | | n.d.a. |
| Carcinogenicity: | | | | | | n.d.a. |
| Reproductive toxicity: | | | | | | n.d.a. |
| Specific target organ toxicity - single exposure (STOT-SE): | | | | | | n.d.a. |
| Specific target organ toxicity - repeated exposure (STOT-RE): | | | | | | n.d.a. |
| Aspiration hazard: | | | | | | n.d.a. |
| Respiratory tract irritation: | | | | | | n.d.a. |
| Repeated dose toxicity: | | | | | | n.d.a. |
| Symptoms: | | | | | | annoyance, cramps, drowsiness, dizziness |

**Ethyl acetate**

| Toxicity/effect | Endpoint | Value | Unit | Organism | Test method | Notes |
|---|---|---|---|---|---|---|
| Acute toxicity, by oral route: | LD50 | 5620 | mg/kg | Rat | | |
| Acute toxicity, by dermal route: | LD50 | >18000 | mg/kg | Rabbit | | |
| Acute toxicity, by inhalation: | LC50 | >28,6 | mg/l/4h | Rat | | |
| Symptoms: | | | | | | lack of appetite, breathing difficulties, dizziness, unconsciousness, drop in blood pressure, cornea opacity, coughing, headaches, gastrointestinal disturbances, intoxication, drowsiness, mucous membrane irritation, dizziness, salivation, nausea and vomiting. |

**diethyl ether**

| Toxicity/effect | Endpoint | Value | Unit | Organism | Test method | Notes |
|---|---|---|---|---|---|---|
| Acute toxicity, by oral route: | LD50 | 1215 | mg/kg | Rat | | |
| Acute toxicity, by inhalation: | LC50 | 73000 | ppm | Rat | | |
| Skin corrosion/irritation: | | | | | | Not irritant |
| Serious eye damage/irritation: | | | | | | Mild irritant |
| Respiratory or skin sensitisation: | | | | | | Not sensitizising |
| Germ cell mutagenicity: | | | | | OECD 471 (Bacterial Reverse Mutation Test) | Negative |
| Symptoms: | | | | | | acidosis, ataxia, dizziness, unconsciousness, increased blood pressure, cornea opacity, collapse, headaches, intoxication, drowsiness, mucous membrane irritation, dizziness, salivation, nausea and vomiting. |

**Ethanol**

| Toxicity/effect | Endpoint | Value | Unit | Organism | Test method | Notes |
|---|---|---|---|---|---|---|
| Skin corrosion/irritation: | | | | Rabbit | OECD 404 (Acute Dermal Irritation/Corrosion) | Not irritant |
| Serious eye damage/irritation: | | | | Rabbit | OECD 405 (Acute Eye Irritation/Corrosion) | Mild irritant |
| Respiratory or skin sensitisation: | | | | Mouse | OECD 429 (Skin Sensitisation - Local Lymph Node Assay) | Not sensitizising |
| Germ cell mutagenicity: | | | | Salmonella typhimurium | OECD 471 (Bacterial Reverse Mutation Test) | Negative |
| Germ cell mutagenicity: | | | | | OECD 475 (Mammalian Bone Marrow Chromosome Aberration Test) | Negative |
| Germ cell mutagenicity: | | | | Mouse | OECD 476 (In Vitro Mammalian Cell Gene Mutation Test) | Negative |
| Germ cell mutagenicity: | | | | | OECD 473 (In Vitro Mammalian Chromosome Aberration Test) | Negative |
| Germ cell mutagenicity: | | | | | OECD 471 (Bacterial Reverse Mutation Test) | Negative |
| Specific target organ toxicity - repeated exposure (STOT-RE): | NOAEL | 1730 | mg/kg/d | Rat | OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents) | Female |
| Specific target organ toxicity - repeated exposure (STOT-RE): | NOAL | >20 | mg/l | Rat | OECD 403 (Acute Inhalation Toxicity) | Male |
| Aspiration hazard: | | | | Human being | | No indications of such an effect. |

| | | | | | | |
|---|---|---|---|---|---|---|
| Symptoms: | | | | | | respiratory distress, dizziness, unconsciousness, drop in blood pressure, vomiting, coughing, headaches, intoxication, drowsiness, mucous membrane irritation, dizziness, nausea |
| Teratogenicity: | | | | | | Negative |
| Experiences in humans: | | | | | | There is no sign that this syndrome is also caused by dermal or inhalative absorption., Excessive alcohol consumption during pregnancy induces the foetus alcohol syndrome (reduced weight at birth, physical and mental disorders). |

**Glycerine**

| Toxicity/effect | Endpoint | Value | Unit | Organism | Test method | Notes |
|---|---|---|---|---|---|---|
| Acute toxicity, by oral route: | LD50 | >12600 | mg/kg | Rat | | |
| Acute toxicity, by dermal route: | LD50 | >18700 | mg/kg | Rabbit | | |
| Skin corrosion/irritation: | | | | | OECD 404 (Acute Dermal Irritation/Corrosion) | Not irritant |
| Serious eye damage/irritation: | | | | | OECD 405 (Acute Eye Irritation/Corrosion) | Not irritant |
| Respiratory or skin sensitisation: | | | | | | Not sensitizising |
| Respiratory or skin sensitisation: | | | | | | Not sensitizising |
| Germ cell mutagenicity: | | | | | OECD 471 (Bacterial Reverse Mutation Test) | Negative |
| Symptoms: | | | | | | abdominal pain, dizziness, diarrhoea, vomiting, headaches, mucous membrane irritation |

## SECTION 12: Ecological information

The product was not tested.

**Arti-Spot Frühkontaktindikator BK 86**

| Toxicity/effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
|---|---|---|---|---|---|---|---|
| Toxicity to fish: | | | | | | | n.d.a. |
| Toxicity to daphnia: | | | | | | | n.d.a. |
| Toxicity to algae: | | | | | | | n.d.a. |
| Persistence and degradability: | | | | | | | n.d.a. |
| Bioaccumulative potential: | | | | | | | n.d.a. |
| Mobility in soil: | | | | | | | n.d.a. |
| Results of PBT and vPvB assessment | | | | | | | n.d.a. |
| Other adverse effects: | | | | | | | n.d.a. |

**Ethyl acetate**

| Toxicity/effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
|---|---|---|---|---|---|---|---|
| Toxicity to fish: | LC50 | 96h | 320 | mg/l | (Oncorhynchus mykiss) | | |
| Toxicity to daphnia: | EC50 | 48h | 717 | mg/l | (Daphnia magna) | | |
| Toxicity to algae: | IC50 | 48h | 3300 | mg/l | (Scenedesmus subspicatus) | | |
| Persistence and degradability: | | 28d | 100 | % | | OECD 301 D (Ready Biodegradability - Closed Bottle Test) | |
| Persistence and degradability: | | 28d | 93,9 | % | | OECD 301 B (Ready Biodegradability - Co2 Evolution Test) | |
| Bioaccumulative potential: | BCF | | 30 | | | | |
| Bioaccumulative potential: | Log Pow | | 0,73 | | | | |
| Mobility in soil: | H (Henry) | | 0,00012 | atm*m3/mol | | | |

**diethyl ether**

| Toxicity/effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
|---|---|---|---|---|---|---|---|
| Toxicity to fish: | LC50 | 96h | 2600 | mg/l | (Pimephales promelas) | | |
| Toxicity to daphnia: | EC50 | 24h | 165 | mg/l | (Daphnia magna) | | |
| Persistence and degradability: | | | | | | | Not readily biodegradable |
| Bioaccumulative potential: | | | | | | | Not to be expected |
| Toxicity to bacteria: | EC50 | 15min | 5600 | mg/l | (Photobacterium phosphoreum) | | |

**Ethanol**

| Toxicity/effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
|---|---|---|---|---|---|---|---|
| Toxicity to fish: | LC50 | 96h | 13000 | mg/l | (Oncorhynchus mykiss) | OECD 203 (Fish, Acute Toxicity Test) | |
| Toxicity to daphnia: | LC50 | 48h | 12340 | mg/l | (Daphnia magna) | | |
| Persistence and degradability: | | | 97 | % | | OECD 301 B (Ready Biodegradability - Co2 Evolution Test) | |
| Bioaccumulative potential: | BCF | | 3,2 | mg/l | | | |
| Bioaccumulative potential: | Log Pow | | -0,32 | | | | |
| Results of PBT and vPvB assessment | | | | | | | Not a PBT-substance, Not a vPvB-substance |
| Other ecotoxicological data: | COD | | 1,9 | g/g | | | |
| Other ecotoxicological data: | BOD5 | | 1 | g/g | | | |

**Glycerine**

| Toxicity/effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
|---|---|---|---|---|---|---|---|
| Toxicity to fish: | LC50 | 96h | > 5000 | mg/l | (Carassius auratus) | | |
| Toxicity to fish: | LC50 | 96h | >10000 | mg/l | (Leuciscus idus) | | |
| Toxicity to daphnia: | EC50 | 24h | >10000 | mg/l | (Daphnia magna) | | |
| Toxicity to algae: | IC5 | 7d | >10000 | mg/l | (Scenedesmus quadricauda) | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Persistence and degradability: | | 14d | 63 | % | | OECD 301 C (Ready Biodegradability - Modified MITI Test (I)) | |
| Bioaccumulative potential: | Log Pow | | -2,66 | | | | |
| Results of PBT and vPvB assessment | | | | | | | n.a. |
| Toxicity to bacteria: | EC5 | 16h | > 10000 | mg/l | (Pseudomonas putida) | | |
| Other ecotoxicological data: | BOD5 | | 0,87 | g/g | | | |
| Other ecotoxicological data: | COD | | 1,16 | g/g | | | |

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

### For the substance / mixture / residual amounts

EC disposal code no.:
The waste codes are recommendations based on the scheduled use of this product.
Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2001/118/EC, 2001/119/EC, 2001/573/EC)
07 03 04 other organic solvents, washing liquids and mother liquors
18 01 06 chemicals consisting of or containing dangerous substances
Recommendation:
Pay attention to local and national official regulations
E.g. suitable incineration plant.

### For contaminated packing material

Pay attention to local and national official regulations
Empty container completely.
Uncontaminated packaging can be recycled.
Dispose of packaging that cannot be cleaned in the same manner as the substance.
Do not perforate, cut up or weld uncleaned container.
Residues may present a risk of explosion.
15 01 04 metallic packaging

## SECTION 14: Transport information

### General statements

UN number: 1263

### Transport by road/by rail (ADR/RID)

UN proper shipping name:
UN 1263 PAINT
Transport hazard class(es): 3
Packing group: I
Classification code: F1
LQ (ADR 2011): 500 ml
LQ (ADR 2009): 3
Environmental hazards: Not applicable
Tunnel restriction code: D/E

### Transport by sea (IMDG-code)

UN proper shipping name:
PAINT
Transport hazard class(es): 3
Packing group: I
EmS: F-E, S-E
Marine Pollutant: n.a
Environmental hazards: Not applicable

### Transport by air (IATA)

UN proper shipping name:
Paint

| | |
|---|---|
| Transport hazard class(es): | 3 |
| Packing group: | I |
| Environmental hazards: | Not applicable |

### Special precautions for user
Persons employed in transporting dangerous goods must be trained.
All persons involved in transporting must observe safety regulations.
Precautions must be taken to prevent damage.

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Freighted as packaged goods rather than in bulk, therefore not applicable.

### Additional information:
Danger code and packing code on request.

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
For classification and labelling see Section 2.

| | |
|---|---|
| Observe restrictions: | Yes |

Observe youth employment law (German regulation).
Regulation (EC) No 1907/2006, Annex XVII

| | |
|---|---|
| VOC (1999/13/EC): | ~ 77,35% w/w |

### 15.2 Chemical safety assessment
No information available at present.

## SECTION 16: Other information

These details refer to the product as it is delivered.

| | |
|---|---|
| Revised sections: | 1, 9 |

The following statements are the indicated R-phrases / H-phrases and classification codes (GHS/CLP) for the ingredients (listed in Section 3).
11 Highly flammable.
12 Extremely flammable.
19 May from explosive peroxides.
22 Harmful if swallowed.
36 Irritating to eyes.
66 Repeated exposure may cause skin dryness or cracking.
67 Vapours may cause drowsiness and dizziness.
H224 Extremely flammable liquid and vapour.
H225 Highly flammable liquid and vapour.
H302 Harmful if swallowed.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Flam. Liq.-Flammable liquid
Eye Irrit.-Eye irritation
STOT SE-Specific target organ toxicity - single exposure - narcotic effects
Acute Tox.-Acute toxicity - oral

## Legend:

AC = Article Categories
acc., acc. to = according, according to
ACGIH = American Conference of Governmental Industrial Hygienists
ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)
AOX = Adsorbable organic halogen compounds
approx. = approximately
Art., Art. no. = Article number
ATE = Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)
BAM = Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)
BAuA = Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)
BCF = Bioconcentration factor
BGV = Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation)
BHT = Butylhydroxytoluol (= 2,6-Di-t-butyl-4-methyl-phenol)

BMGV = Biological monitoring guidance value (EH40, UK)
BOD = Biochemical oxygen demand
CAS = Chemical Abstracts Service
CESIO = Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques
CIPAC = Collaborative International Pesticides Analytical Council
CLP = Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)
CMR = carcinogenic, mutagenic, reproductive toxic
COD = Chemical oxygen demand
CTFA = Cosmetic, Toiletry, and Fragrance Association
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
DOC = Dissolved organic carbon
DVS = Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes)
e.g. = for example (abbreviation of Latin 'exempli gratia'), for instance
EC = European Community
ECHA = European Chemicals Agency
EEA = European Economic Area
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
ELINCS = European List of Notified Chemical Substances
EN = European Norms
EPA = United States Environmental Protection Agency (United States of America)
ERC = Environmental Release Categories
ES = Exposure scenario
etc. = et cetera
EU = European Union
EWC = European Waste Catalogue
Fax. = Fax number
gen. = general
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
GWP = Global warming potential
HET-CAM = Hen's Egg Test - Chorionallantoic Membrane
IARC = International Agency for Research on Cancer
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IBC (Code) = International Bulk Chemical (Code)
IC = Inhibitory concentration
IMDG-code = International Maritime Code for Dangerous Goods
incl. = including, inclusive
IUCLID = International Uniform ChemicaL Information Database
LC = lethal concentration
LC50 = lethal concentration 50 percent kill
LCLo = lowest published lethal concentration
LD = Lethal Dose of a chemical
LD50 = Lethal Dose, 50% kill
LDLo = Lethal Dose Low
LMBG = Lebensmittel- und Bedarfsgegenständegesetz (= Foodstuffs and Commodities Law)
LOAEL = Lowest Observed Adverse Effect Level
LOEC = Lowest Observed Effect Concentration
LOEL = Lowest Observed Effect Level
LQ = Limited Quantities
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
n.a. = not applicable
n.av. = not available
n.c. = not checked
n.d.a. = no data available
NIOSH = National Institute of Occupational Safety and Health
No. = Number
NOAEC = No Observed Adverse Effective Concentration
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
NOEL = No Observed Effect Level
ODP = Ozone Depletion Potential
OECD = Organisation for Economic Co-operation and Development
PC = product category (= Chemical product category)
PE = Polyethylene

PNEC = Predicted No Effect Concentration
POCP = Photochemical ozone creation potential
ppm = parts per million
PROC = Process category
PTFE = Polytetrafluorethylene
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)
RID = Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)
SADT = Self-Accelerating Decomposition Temperature
SAR = Structure Activity Relationship
SU = Sector of use
SVHC = Substances of Very High Concern
Tel. = Telephone
ThOD = Theoretical oxygen demand
TOC = Total organic carbon
TRGS = Technische Regeln für Gefahrstoffe (=Technical Regulations for Hazardous Substances)
VbF = Verordnung über brennbare Flüssigkeiten (= Regulation for flammable liquids (Austria))
VOC = Volatile organic compounds
vPvB = very Persistent, very Bioaccumulative
WEL-TWA, WEL-STEL = WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period), WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period) (EH40, UK).
WHO = World Health Organization

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.
No responsibility.
These statements were made by:

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