



**MATERIAL SAFETY DATA SHEET****Product: BAKTOL 50, 80, 100, 150, 180, 200**

Version of 19/11/2010

**4 - First aid measures**

<b>General observations:</b>	In case of doubt or if symptoms persist, seek medical advice. NEVER give anything by mouth to an unconscious person.
<b>In case of skin contact:</b>	Remove contaminated clothing and immediately wash skin with water and soap for 10 to 15 minutes. In case of irritation or if contact is widespread and prolonged, seek medical advice.
<b>In case of eye contact:</b>	Rinse immediately with plenty of cold water for 10 to 15 minutes while holding the eyelid(s) open. If contact lenses are used, remove the lenses and continue washing the eyes. Protect eyes with a light bandage or a clean and dry handkerchief. If irritation persists, consult an ophthalmologist.
<b>In case of ingestion:</b>	Rinse mouth thoroughly. Drink plenty of water. Have the victim rest. Consult a physician and show the label.
<b>In case of inhalation:</b>	Remove victim to fresh air. If breathing is irregular or has stopped, administer artificial respiration and seek medical advice. If the person is unconscious, place in the recovery position and call an ambulance. In case of complications, consult a physician.

**5 - Firefighting measures**

<b>Recommended fire-fighting agents:</b>	Water spray. Cool the containers exposed to the fire with water spray.
<b>Protective equipment:</b>	Wear a complete fire suit and respiratory protection (insulating self-contained breathing apparatus).
<b>Combustion products:</b>	Do not breathe smoke. Product may form toxic sulfur dioxide smoke.
<b>Additional information:</b>	Prevent fire extinguishing water from contaminating surface or ground waters. Do not spray water directly on container to prevent product spills.

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## 6 - Accidental release measures

<b>Individual precautions:</b>	Consult protection measures cited in paragraphs 7 and 8. Avoid contact with the product. If spill is large, evacuate the personnel and only allow intervention by trained personnel equipped with safety apparatus.
<b>Measures for environmental protection:</b>	If the product has entered a waterway and/or drainage system or has contaminated the ground and/or the vegetation, notify the competent authorities.
<b>Cleaning measures:</b>	Contain spill with sand or earth and collect the product using mechanical equipment. Rinse the contaminated surface with plenty of water. Keep in suitable and closed containers for recycling or disposal of collected spill according to applicable regulation (See paragraph 13).

## 7 - Handling and storage

These recommendations are applicable to the working area where the product is handled.

<b>Handling:</b>	Avoid inhalation and skin or eye contact. Do not drink or eat in working area. See paragraph 8. Provide ventilation and adequate equipment disposal.
<b>Fire prevention:</b>	Store away from ignition sources. Do not expose solution to heat. Prevent access to unauthorized personnel.
<b>Storage:</b>	Store tightly closed container in a cool, dry and well ventilated area.

## 8 - Exposure controls/personal protection

Use individual protective equipment in accordance with Directive 89/686/EEC



Compulsory protective equipment

Select personal protective equipment according to the concentration and quantity of hazardous substances and workplace. Consult supplier with regards to the chemical resistance of protective equipment.



Respiratory protection

Wear a mask with a cartridge that protects against SO<sub>2</sub>.



Eye protection

Wear safety goggles (EN 166) with side protection.



Hand protection

Wear chemically resistant gloves

**Hygiene measures:** Immediately remove any contaminated clothing. Preventive protection of skin. Wash hands and face after work.

Maintain local and work areas perfectly clean, aerate and clean frequently.

**Exposure limits:** TLV TWA: 2 ppm (SO<sub>2</sub>)

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## 9 - Physical and chemical properties

### General information:

- |                   |                       |
|-------------------|-----------------------|
| • Appearance:     | Liquid                |
| • Colour:         | Colorless to greenish |
| • Odour:          | Pungent               |
| • Molecular mass: | 120.16 g/mol          |

### Important information regarding health, safety and environment:

- |                          |                                     |
|--------------------------|-------------------------------------|
| • Partition coefficient: | Log Pow (20°C) -4.0 (octanol/water) |
| • pH (at 100%):          | 3.5 – 4.5                           |
| • Density (20°C):        | 1.18 – 1.26 kg/dm <sup>3</sup>      |

### Additional information:

- |                               |         |
|-------------------------------|---------|
| • Water solubility (at 20°C): | Soluble |
| • Melting / boiling point:    | NA      |
| • Auto-ignition temperature:  | NA      |
| • Thermal decomposition:      | 105°C   |
| • Apparent density:           | NA      |
| • Vapor pressure (20°C):      | NA      |
| • Flash point:                | NA      |

## 10 - Stability and reactivity

The preparation is stable under the handling and storage conditions recommended in paragraph 7 of the MSDS.

- **Conditions to avoid:** Intense heat (decomposition with release of SO<sub>2</sub>) and low temperature (below 10°C, risk of crystallization)
- **Substances to avoid:** Acids and oxidizing agents, nitrites.
- **Hazardous decomposition products:** Toxic gases (sulfur dioxide).

## 11 - Toxicological information

**Acute toxicity:** LD50 (oral, rat) 2300 mg/kg (anhydrous substance)

Other dangerous properties can not be excluded. The product should be handled with the care usual when dealing with a chemical product.

## 12 - Ecological information

Use the product sensibly. Avoid release to the environment.

Distribution: Log P(o/w): -4.0

Ecotoxic effects:

- Fish (Brachydanio rerio) LC50 460-1000 mg/L (96h)
- Microorganisms (Pseudomonas putida) CE50 65 mg/L (17h)

Chemical Oxygen Demand (COD) : 140 mg/g

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## 13 – Disposal considerations

**Product:** Chemical products should be disposed of or recycled in accordance with national regulations.

**Packaging:** Packaging should be disposed of in accordance with the regulations applicable in each country or should be disposed of through a recycling packaging program.

## 14 - Transport information

Exempt from transport classification and labelling.

## 15 - Regulatory information

**Classification in accordance with:** Directive 67/548/EEC (Dangerous substances) and its versions. Regulation (EC) N°1272/2008 and its modifications ( 453/2010 Annex I) were also taken into consideration.

## 16 - Other information

The information presented in this material safety data sheet is based on the data provided by our suppliers.

The information contained in this data sheet is based on our knowledge at the date shown above. It exclusively concerns the product in question and does not guarantee a specific quality. The user must make sure of the conformity and completeness of information with regards to the specific use of the product.

This data sheet cancels and replaces any previous version.

**R phrase text cited in paragraph 2 and 3:** R31: Contact with acids liberates toxic gas.  
R36/37: Irritating to eyes and respiratory system.

### **Substance classification in accordance with the regulation (EC) No 1272/2008:**

Eye irritation: Hazard category 2 / H319

Specific target organ toxicity, single exposure: Hazard category 3 / H335



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- Warning
- H319: Causes serious eye irritation.
- H335: May cause respiratory irritation.
- EUH031: Contact with acids liberates toxic gas.
- P280: Wear protective gloves / protective clothing / eye protection / face protection.
- P271: Use only outdoors or in a well-ventilated area.
- P261: Avoid breathing dust / fume / gas / mist / vapours / spray.
- P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P312: Call a POISON CENTER or doctor / physician if you feel unwell.
- P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.