



**KIMYAGARAN**  
Emrooz  
Chemical Industries Co.

## **Safety Data Sheet**

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Metronidazole Benzoate

**Product Description:** Metronidazole Benzoate

**CAS No.:** 13182-89-3

**Product Formulation:** C<sub>13</sub>H<sub>13</sub>N<sub>3</sub>O<sub>4</sub>

**Common Names:** Klion Suspension; Metronidazole Benzoate; 2-Methyl-5-nitro-1H-imidazole-1-ethanol 1-Benzoate

**Manufacturer:** Kimyagaran Emrooz Chemical Industries Co.

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## 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008

Muta. 2 H341 Suspected of causing genetic defects.

Carc. 2 H351 Suspected of causing cancer.

Aquatic Acute 3 H402 Harmful to aquatic life.

### Label elements

**Labelling according to Regulation (EC) No 1272/2008** The substance is classified and labeled according to the CLP regulation.

**Hazard pictograms** GHS08

**Signal word** Warning

### Hazard statements

H341 Suspected of causing genetic defects.

H351 Suspected of causing cancer.

H402 Harmful to aquatic life.

### Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P273 Avoid release to the environment.

P201 Obtain special instructions before use.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

### Classification system:

**NFPA ratings** (scale 0 - 4)

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**HMIS-ratings** (scale 0 - 4)

**Other hazards**

**Results of PBT and vPvB assessment**

**PBT:** Not applicable.

**vPvB:** Not applicable.

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### 3. COMPOSITION

Chemical Name	Wt.%	CAS No.
Metronidazole Benzoate	98.5 - 101	13182-89-3

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### 4. FIRST AID MEASURES

**Description of first aid measures**

**After inhalation:** Supply fresh air; consult doctor in case of complaints.

**After skin contact:** Generally the product does not irritate the skin.

**After eye contact:** Rinse opened eye for several minutes under running water.

**After swallowing:** Rinse out mouth and then drink plenty of water.

**Most important symptoms and effects, both acute and delayed** No further relevant information available.

**Indication of any immediate medical attention and special treatment needed** No further relevant information available.

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### 5. FIRE-FIGHTING MEASURES

**Extinguishing media**

**Suitable extinguishing agents:**

CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**Special hazards arising from the substance or mixture** No further relevant information available.

**Advice for firefighters**

**Protective equipment:** No special measures required.

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### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures** Not required.

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**Environmental precautions:**

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

**Methods and material for containment and cleaning up:** Dispose contaminated material as waste according to item 13.

**Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

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## 7. HANDLING AND STORAGE

**Precautions for safe handling** Prevent formation of dust.

**Information about protection against explosions and fires:** No special measures required.

**Conditions for safe storage, including any incompatibilities**

**Storage:**

**Requirements to be met by storerooms and receptacles:** No special requirements.

**Information about storage in one common storage facility:** Not required.

**Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.

**Specific end use(s)** No further relevant information available.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Additional information about design of technical systems:** No further data; see item 7.

Control parameters

*Components with limit values that require monitoring at the workplace:* Not required.

**Additional information:** The lists that were valid during the creation were used as basis.

**Exposure controls**

**Personal protective equipment:**

**General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

**Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

**Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

#### **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

#### **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:** Not required.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

### **Information on basic physical and chemical properties**

#### **General Information**

#### **Appearance:**

**Form:** Crystalline powder

**Color:** Yellowish

**Odor:** Characteristic

**Odour threshold:** Not determined.

**pH-value:** Not applicable.

#### **Change in condition**

**Melting point/Melting range:** 99 - 102 °C (210 - 216 °F)

**Boiling point/Boiling range:** Undetermined.

**Flash point:** Not applicable.

**Flammability (solid, gaseous):** Product is not flammable.

#### **Ignition temperature:**

**Decomposition temperature:** Not determined.

**Auto igniting:** Not determined.

**Danger of explosion:** Product does not present an explosion hazard.

#### **Explosion limits:**

**Lower:** Not determined.

**Upper:** Not determined.

**Vapor pressure:** Not applicable.

**Density:** Not determined.

**Relative density** Not determined.

<b>Vapour density</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Solubility in / Miscibility with Water:</b>	Not determined.
<b>Partition coefficient (n-octanol/water):</b>	Not determined.
<b>Viscosity:</b>	
<b>Dynamic:</b>	Not applicable.
<b>Kinematic:</b>	Not applicable.
<b>Other information</b>	No further relevant information available.

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## 10. STABILITY AND REACTIVITY

### Reactivity

#### Chemical stability

**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

**Possibility of hazardous reactions** No dangerous reactions known.

**Conditions to avoid** No further relevant information available.

**Incompatible materials:** No further relevant information available.

**Hazardous decomposition products:** No dangerous decomposition products known.

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## 11. TOXICOLOGICAL INFORMATION

### Information on toxicological effects

#### Acute toxicity:

#### LD/LC50 values that are relevant for classification:

Oral LD50 3000 mg/kg (rat)

#### Primary irritant effect:

**on the skin:** No irritant effect.

**on the eye:** No irritating effect.

**Sensitization:** No sensitizing effects known.

#### Additional toxicological information:

#### Carcinogenic categories

**IARC (International Agency for Research on Cancer)** Substance is not listed.

**NTP (National Toxicology Program)** Substance is not listed.

**OSHA-Ca (Occupational Safety & Health Administration)** Substance is not listed.

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## 12. ECOLOGICAL INFORMATION

### Toxicity

**Aquatic toxicity:** No further relevant information available.

**Persistence and degradability** No further relevant information available.

**Bioaccumulative potential** No further relevant information available.

**Mobility in soil** No further relevant information available.

### Ecotoxicological effects:

**Remark:** Harmful to fish

### Additional ecological information:

#### General notes:

**Water hazard class 3 (Self-assessment):** extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

Harmful to aquatic organisms

### Results of PBT and vPvB assessment

**PBT:** Not applicable.

**vPvB:** Not applicable.

Other adverse effects No further relevant information available.

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

**Recommendation:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

### Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

## 14. TRANSPORT INFORMATION

UN-Number

DOT, ADR, ADN, IMDG, IATA

Void

UN proper shipping name

DOT, ADR, ADN, IMDG, IATA

Void

Transport hazard class(es)

DOT, ADR, ADN, IMDG, IATA

Class	Void
Packing group	
DOT, ADR, IMDG, IATA	Void
Environmental hazards:	
Marine pollutant:	No
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	
UN "Model Regulation":	Not applicable.

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## 15. REGULATORY INFORMATION

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

No further relevant information available.

**Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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## 16. OTHER INFORMATION

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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## Caution

**The information contained in this Material Safety Data Sheet (MSDS) is believed to be correct since it was obtained from sources we believe are reliable. However no representation, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications, hazards connected with the use of the material, or the results to be obtained from the use thereof. User assumes all risks and liability of any use, processing or handling of any material, variations in methods, conditions and equipment used to store, handle, or process the material and hazards connected with the use of the material are solely the responsibility of the user and remain at his sole discretion.**

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