

SAFETY DATA SHEET

Section 1 - Identification of Substance or Mixture and Company

Product identify:

Product name: Metronidazole
Synonyms: 2-Methyl-5-nitroimidazole-1-ethanol
Catalog number: PI-28533

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

Identified uses: Laboratory chemicals, Manufacture of substances

Details of the supplier of the safety data sheet

Company identification: PI Chemicals Ltd.
633 Eshan Road,
Pudong New Area, Shanghai China, 201203

Telephone number: +86-21-58953700

Fax number: +86-21-58953701

E-mail address: info@pipharm.com

Emergency telephone number

Emergency number: +86-21-58953706

Section 2 - Hazards Identification

Classification of the substance or mixture:

Regulation (EC) No 1272/2008

Carcinogenicity Category 2

Label elements

Classification according to (EC) No 1272/2008



Signal word: Warning

Hazard statement(s):

H351: Suspected of causing cancer.

Precautionary statement(s)

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P281: Use personal protective equipment as required.

Accroding to EU Directive 67/548/EEC or 1999/45/EC.

Symbol(s): Xn Harmful

Risk phrases:

R 40: Limited evidence of a carcinogenic effect

Safety phrases:

S 36/37: Wear suitable protective clothing and gloves.

HMS classification:

Health hazard: 1

Chronic health hazard: *

Flammability: 0

Physical hazards : 0

NFPA rating:

Health hazard: 0

Fire: 0

Reactivity hazard: 0

Section 3: Composition & Information on Ingredients

Molecular formula: C₆H₉N₃O₃

Molecular weight: 171.15

Component		Concentration
CAS Number:	443-48-1	98%
EC Number:	207-136-1	

Section 4 - First Aid Measures

Eye: Flush eyes with plenty of water for at least 15 minutes. Get medical aid if symptoms appear.

Skin: Wash skin with plenty of water at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops and persists.

Ingestion: Wash mouth out with water. Get medical aid immediately.

Inhalation: Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical aid.

Section 5 – Fire-Fighting Measures

Extinguishing media: Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Special hazards arising from the substance or mixture: Carbon oxides, nitrogen oxides

Advice for firefighters: Wear a self-contained breathing apparatus for fire fighting if necessary

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Use proper personal protective equipment as indicated in Section 8.

Environmental precautions: Prevent further spillage or leakage when safe and capable

Methods and materials for containment and cleaning up:

Vacuum or sweep up material and keep in a suitable closed container for disposal. Do not flush with water.

Section 7 - Handling and Storage

Precautions for safe handling:

Provide appropriate exhaust ventilation at places where dust is formed. Avoid contact with skin, eyes and clothes. Avoid inhalation of vapors and spray mist.

Conditions for safe storage, including any incompatibilities:

Store in a dry, well-ventilated place. Keep tightly closed. Keep away from light.

Recommended storage temperature: 2 - 8 °C

Section 8 - Exposure Controls/Personal Protection

Control parameters:

Contains no materials with occupational exposure limits.

Exposure controls:

Ensure well ventilation, good industrial hygiene and safety practice.

Personal protective equipment

Eye/Face protection:

Wear appropriate protective eyeglasses under the standards such as EN166(EU) or type ABEK(EN14387).

Skin/Body protection:

Wear appropriate protective gloves which have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN374 derived from it to prevent skin exposure. Dispose of contaminated gloves in accordance with applicable laws. Wash and dry hands.

Wear appropriate protective clothing to prevent skin exposure.

Respiratory protection:

Use an approved respirator and components under appropriate government standards such as NIOSH(US) or CEN(EU) if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9- Physical and Chemical Properties

Physical state:

Crystalline powder

Color:

White to light yellow

Odour:	No data available
Melting point/freezing point:	159 - 161 °C
Initial boiling point and boiling range:	No data available
Flash point:	No data available
Evaporation rate:	No data available
Flammability(solid, gas):	No data available
Upper/lower flammability or explosive limits:	No data available
Vapour pressure:	No data available
Vapour density:	No data available
Relative density:	No data available
Solubility:	No data available
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	No data available

Section 10-Stability and Reactivity

Reactivity:	No data available
Chemical stability:	Stable under recommended temperatures and pressures.
Possibility of hazardous reactions:	No data available
Conditions to avoid:	No data available
Incompatible materials:	Strong oxidizing agents
Hazard Decomposition products:	Carbon oxides, nitrogen oxides

Section 11 - Toxicological Information

Acute toxicity:

Component: Metronidazole

LD50 Oral - rat - 3000 mg/kg.

Remarks: Behavioral: Somnolence (general depressed activity).

Cyanosis Nutritional and Gross Metabolic: Changes in: Body temperature decrease.

Skin corrosion/irritation: No data available

Serious eye damage/eye irritation: No data available

Respiratory or skin sensitization: No data available

Germ cell mutagenicity: No data available

Carcinogenicity:

listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

IARC: 2B - Group 2B: Possibly carcinogenic to humans (Metronidazole)

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: Reasonably anticipated to be a human carcinogen (Metronidazole)

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: No data available
Specific target organ toxicity(STOT)-single exposure: No data available
Specific target organ toxicity (STOT)-repeated exposure: No data available
Aspiration hazard: No data available
Additional information: RTECS#: N15600000

Section 12 – Ecological Information

Toxicity:
Component: Metronidazole
Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - > 100 mg/l - 96 h
mortality NOEC - Danio rerio (zebra fish) - 500 mg/l - 96 h
Toxicity to daphnia
and other aquatic invertebrates: EC50 - Daphnia magna (Water flea) - > 1,000 mg/l - 48 h
Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
Results of PBT and vPvB assessment: No data available
Other adverse effects: No data available

Section 13 - Disposal Consideration

Waste treatment methods
Product: Dispose of in accordance with federal, state and local environmental regulations
Contaminated packaging: Dispose of as unused product

Section 14 - Transport Information

IATA
Not dangerous goods

IMDG
Not dangerous goods

RID/ADR
Not dangerous goods

DOT(US)

Not dangerous goods

Section 15 - Regulatory Information

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

No data available

*Chemical safety assessment:*No data available

Section 16 – Other Information

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