



SAFETY DATA SHEET

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Revised edition no : 1

Date : 5 / 8 / 2011

Supersedes : 8 / 7 / 2011

6-Mercaptopurine monohydrate

M0129**Danger**

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

1.1. Product identifier

Identification of the product : Raw material
Product code : M0129
Trade name : 6-Mercaptopurine monohydrate
CAS number : CAS No : 006112-76-1

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

Use : For professional use only.
Duchefa Biochemie B.V. products are only intended for in vitro laboratory research purposes.

1.3. Details of the supplier of the safety data sheet

Company identification : Duchefa Biochemie B.V.
A. Hofmanweg 71
2031 BH Haarlem The Netherlands
Tel: +31(0)23-5319093
Fax: +31(0)23-5318027
E-mail:info@duchefa.nl

1.4. Emergency telephone number

Emergency phone nr : Tel: (+31)-(0)23-5319093 (local time : 9.00 to 17.00)
See www.who.int/ipcs/en/ for a local poison centre
National Poison Information Centre :Europe NL : +31 30 274 88 88
(this service is only available to health professionals)

SECTION 2 Hazards identification

2.1. Classification of the substance or mixture

Classification EC 67/548 or EC 1999/45

: Carc. Cat. 3; R40
T; R23/25

Hazard Class and Category Code Regulation EC 1272/2008 (CLP)

• Health hazards : Acute toxicity, Oral - Category 3 - Danger (CLP : Acute Tox. 3)
Germ cell mutagenicity - Category 2 - Warning (CLP : Muta. 2)
Reproductive toxicity - Fertility - Category 2 - Warning (CLP : Repr. 2)
Reproductive toxicity - Unborn Child - Category 2 - Warning (CLP : Repr. 2)

2.2. Label elements

Labelling EC 67/548 or EC 1999/45

• Symbol(s)



: T : Toxic

• R Phrase(s)

: R23/25 : Toxic by inhalation and if swallowed.
R40 : Limited evidence of a carcinogenic effect.

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SECTION 2 Hazards identification (continued)

- S Phrase(s) : S22 : Do not breathe dust.
S28 : After contact with skin, wash immediately with
S53 : Avoid exposure - obtain special instructions before use.

Labelling Regulation EC 1272/2008 (CLP)

- Hazard pictograms



- Hazard pictograms code : GHS06 - GHS08
- Signal words : Danger
- Hazard statements : H301 - Toxic if swallowed.
H331 - Toxic if inhaled.
H341 - Suspected of causing genetic defects.
H351 - Suspected of causing cancer.
H360 - May damage fertility or the unborn child.
- Precautionary statements
 - General : P202 - Do not handle until all safety precautions have been read and understood.
 - Prevention : P281 - Use personal protective equipment as required.
 - Response : P307+P310 - IF EXPOSED : Immediately call a POISON CENTER or doctor.

2.3. Other hazards

None under normal conditions.

SECTION 3 Composition/information on ingredients

Substance / Preparation : Substance.
6-Mercaptopurine monohydrate
CAS No :006112-76-1
EC No :200-037-4
Annex No :---
Ref REACH :---

Components : This product is hazardous.

Composition : Structural formula C₅H₄N₄S.H₂O
Molecular weight (g/mol) 170.2

Substance name	Contents	CAS No	EC No	Annex No	Ref REACH	Classification
6-Mercaptopurine monohydrate	> 96 %	6112-76-1	200-037-4	----	----	R40 T; R23/25 Acute Tox. 3 (oral) Muta. 2 Repr. 2 Repr. 2

Contains no other components or impurities which will influence the classification of the product.

SECTION 4 First aid measures

4.1. Description of first aid measures

- Inhalation : Seek medical attention immediately.
Remove victim to fresh air.
- Skin contact : Seek medical attention immediately.
Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
- Eye contact : Seek medical attention immediately.
Rinse immediately with plenty of water.

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SECTION 4 First aid measures (continued)

- Ingestion : Give water to drink.
Seek medical attention immediately.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms and effects, both acute and delayed : Damage to liver.
Ingestion may cause nausea and vomiting.
Can affect blood cell formation.

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

Medical attention and special treatment needed : No data available.

SECTION 5 Fire-fighting measures

5.1. Extinguishing media

Extinguishing media : Dry powder.
- Suitable extinguishing media : Carbon dioxide (CO₂).
Alcohol foam.
Water spray.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products : Under fire conditions, hazardous fumes will be present.

5.3. Advice for fire-fighters

Protection against fire : Do not enter fire area without proper protective equipment, including respiratory protection.
Wear proper protective equipment.
Special procedures : Avoid (reject) fire-fighting water to enter environment.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General precautions : Evacuate area.
Personal precautions : Spill should be handled by trained cleaning personnel properly equipped with respiratory and eye protection.
Technical measures : Use good housekeeping practices to avoid rendering dust airborne.

6.2. Environmental precautions

Environmental precautions : Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

Clean up methods : Dispose in a safe manner in accordance with local/national regulations.
Sweep up dry powder and dispose properly.

6.4. Reference to other sections

Reference to other sections : No Reference

SECTION 7 Handling and storage

7.1. Precautions for safe handling

General : Store in dry, well-ventilated area.
Personal protection : Ensure prompt removal from eyes, skin and clothing.

7.2. Conditions for safe storage, including any incompatibilities

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SECTION 7 Handling and storage (continued)

Storage : Store at room temperature

7.3. Specific end use(s)

Specific end use(s) : For professional use only.
Duchefa Biochemie B.V. products are only intended for in vitro laboratory research purposes.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Industrial hygiene : Provide local exhaust or general room ventilation.

8.2. Exposure controls

- **Eye protection** : Safety glasses.
- **Hand protection** : Wear suitable gloves resistant to chemical penetration.
- **Respiratory protection** : P3 Wear approved mask.

SECTION 9 Physical and chemical properties

9.1. Information on basic physical and chemical properties

• Appearance

Appearance : Powder.

Colour : Yellow.

• Odour

Odour : Not established.

• Odour threshold

Odour threshold : Not established.

• pH

pH value : No data available.

• Melting point / Freezing point

Melting point [°C] : 315

• Initial boiling point - boiling range

Boiling point [°C] : No data available.

• Flash point

Flash point [°C] : No data available.

• Evaporation rate

Evaporation rate (ether=1) : No data available.

• Flammability

Flammability range [vol% in air] : No data available.

• Explosion limits (lower - upper)

Explosion limits : No data available.

• Vapour pressure

Vapour pressure : No data available.

• Vapour density

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Relative vapour density (air=1) : No data available.

• Relative density

Relative density : Not established.

• Solubility

Solubility in water : Partial.

• Partition coefficient : n-octanol / water

Log P octanol / water at 20°C : -0.25

• Auto-ignition temperature

Auto-ignition temperature [°C] : No data available.

• Thermal decomposition

Thermal decomposition [°C] : No data available.

• Viscosity

Viscosity : No data available.

• Explosive Properties

Explosive Properties : Not established.

• Oxidising properties

Oxidising properties : Not established.

9.2. Other information**SECTION 10 Stability and reactivity****10.1. Reactivity**

Stable under normal conditions of storage, handling and use.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions : Stable.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materialsMaterials to avoid : Strong bases.
Strong acids.
Strong oxidizers.**10.6. Hazardous decomposition products**

Hazardous decomposition products : When heated to decomposition, emits dangerous fumes.

COx

NOx

SOx

SECTION 11 Toxicological information**11.1. Information on toxicological effects**

- Inhalation : May cause respiratory irritation.

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SECTION 11 Toxicological information (continued)

- Dermal : Causes skin irritation.
- Ocular : Causes eye irritation.
- Rat oral LD50 [mg/kg] : 277 Anhydrous
- Mutagenicity : Suspected of causing genetic defects.
- Toxic for reproduction : Fertility : May impair fertility.
- Toxic for reproduction : unborn child : May cause harm to the unborn child.

SECTION 12 Ecological information

12.1. Toxicity

48 Hour-EC50 - Daphnia magna [mg/l] : 55

12.2. Persistence - degradability

No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential : None under normal conditions.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

Environmental precautions : Avoid release to the environment.
Prevent entry to sewers and public waters.

SECTION 13 Disposal considerations

13.1. Waste treatment methods

General : Avoid release to the environment.
Dispose in a safe manner in accordance with local/national regulations.

SECTION 14 Transport information

14.1. UN Number

UN No. : 2811

14.2. Proper shipping name

UN2811 TOXIC SOLID, ORGANIC, N.O.S.(6-mercaptopurine monohydrate), 6.1, III, (E)

14.3. Transport Hazard Classification

6.1

Labelling ADR



: 6.1

Land transport

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SECTION 14 Transport information (continued)

H.I. nr	: 60
Proper shipping name	: UN2811 TOXIC SOLID, ORGANIC, N.O.S.(6-mercaptopurine monohydrate), 6.1, III, (E)
- ADR Class	: 6.1
- ADR Packing group	: III
- Tunnel Restriction	: C/E
Sea transport	
- IMO-IMDG code	: Class : 6.1
- IMO Packing group	: III
- IMDG-Marine pollution	: YES
- Emergency Schedule (EmS) - Fire	: F-A S-A
Air transport	
- ICAO/IATA	: Packaging instructions cargo : 619 Packaging instructions passenger: 619
- Proper shipping name	: TOXIC SOLID, ORGANIC, N.O.S. (6-Mercaptopurine monohydrate)
• Class	: 6.1
- IATA Packing group	: III

14.4. Packing group

III

14.5. Environmental hazards

In case of spillage and/or leakage : Clean up even minor leaks or spills if possible without unnecessary risk.

14.6. Special precautions for user

Personal precautions : The driver shall not attempt to deal with any fire of the load.

Emergency action in case of accident : Keep public away from danger area.
NOTIFY POLICE AND FIRE BRIGADE IMMEDIATELY.

Additional information : None.

14.7. Bulk transport - annex II Marpol 73/78 - IBC

Not applicable.

SECTION 15 Regulatory information

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

Ensure all national/local regulations are observed.

15.2. Chemical Safety Assessment

Not established.

SECTION 16 Other information

Further information : The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

Revision : 0 Complete SDS revision
1 :
1.3 Add poison centre information
14. Shipping name
15. Regulatory information

The contents and format of this SDS are in accordance with REGULATION (EC) No 1907/2006 OF THE EUROPEAN

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PARLIAMENT AND OF THE COUNCIL

End of document

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