

# Material Safety Data Sheet

Hazardous according to criteria of Worksafe Australia  
Hazardous according to Occupational Safety and Health Administration's (OSHA)  
Communication Standard, 29 CFR 1910.1200

## Magnesium Base (R2)

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

THERMO ELECTRON  
189 - 199 Browns Rd  
NOBLE PARK VIC 3174  
AUSTRALIA  
Tel: +61 3 9790 4100  
Fax: +61 3 9790 4155  
E-mail: [info.clinicalchemistry@thermo.com](mailto:info.clinicalchemistry@thermo.com)

THERMO ELECTRON  
331 South 104<sup>th</sup> Street  
LOUISVILLE, CO 80027  
U.S.A  
Tel: (303) 581 6428  
Fax: (303) 581 6429  
E-mail: [info.clinicalchemistry@thermo.com](mailto:info.clinicalchemistry@thermo.com)

**Product Name:** Magnesium Base (R2)

**Catalog Number:** 7500-221

**Use:** This reagent is intended for the in vitro determination of magnesium in human serum, plasma or urine.

**UN Number:** None allocated

**Proper Shipping Name:** NONE ALLOCATED

**Dangerous Goods Class:** None allocated

**Subsidiary risk:** None allocated

**Packing Group:** None allocated

**Hazchem Code:** None allocated

**Poison Schedule:** S5

#### Contact Point

##### Australia

Quality Assurance Manager:

Tel: +61 3 9790 4100

Mon – Fri 9:00am to 5:00pm

##### U.S.A

Chemtel

24 Hour Emergency Assistance

1-800-255-3924

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE NAME	Proportion	CAS Number
POTASSIUM HYDROXIDE	1 to < 2 %	1310-58-3
WATER AND OTHER NON-HAZARDOUS SUBSTANCES	Balance	Mixture

All other ingredients determined not to be hazardous according to the criteria of Worksafe Australia and OSHA Communication Standard 29 CFR 1910.1200.

### 3. HAZARD IDENTIFICATION

HAZARDOUS ACCORDING TO THE CRITERIA OF WORKSAFE AUSTRALIA and OSHA Communication Standard 29 CFR 1910.1200

**HAZARD CATEGORY:** Irritant

#### ACUTE HEALTH EFFECTS

##### **Swallowed:**

May cause irritation to mouth, throat and stomach with effects including pains in the stomach, which may lead to nausea, vomiting and diarrhoea.

##### **Eye:**

Will cause severe irritation to the eyes, with effects including: tearing, pain, stinging and blurred vision.

##### **Skin:**

Will cause irritation to the skin, with effects including: Redness, itchiness, and drying/defatting.

##### **Inhaled:**

Mists from the product may cause irritation to the nose, throat and respiratory system.

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### 3. HAZARD IDENTIFICATION (cont)

**Chronic:**

Prolonged or repeated skin contact may lead to dermatitis. Prolonged contact may cause severe eye irritation and some form of permanent eye damage may occur.

### 4. FIRST AID MEASURES

**Swallowed:**

If swallowed, **DO NOT** induce vomiting. If conscious, give 1 to 2 glasses of water to drink. Seek immediate medical assistance.

**Eye:**

If material is splashed into eyes, immediately, flush with plenty of water for 15 minutes, ensuring eye lids are held open. If irritation persists transport to hospital or doctor.

**Skin:**

If material is splashed onto the skin, remove any contaminated clothing and wash skin thoroughly with soap and water. If irritation persists transport to hospital or doctor.

**Inhaled:**

Move victim to fresh air. Apply resuscitation if victim is not breathing.

**First Aid Facilities:**

Eye wash fountain, safety shower and normal wash room facilities.

**Advice to Doctor:**

Treat symptomatically.

In case of poisoning, contact Poisons Information Centre

**In Australia call Tel: 131126**

**In New Zealand Tel: 034747000**

### 5. FIRE-FIGHTING MEASURES

**Fire/Explosion Hazard**

If safe to do so, move undamaged containers from fire area.

**Hazardous Decomposition Products:** Emits smoke and fumes when heated to decomposition.

**Fire Fighting Procedures:** Fire fighters to wear Self-contained breathing apparatus (SCBA) in confined spaces, in oxygen deficient atmospheres or if exposed to products of decomposition. Full protective clothing is also recommended.

**Extinguishing Media:** Use extinguishing media suitable for surrounding fire situation.

**Flammability**

This material is not a flammable or combustible liquid.

### 6. ACCIDENTAL RELEASE MEASURES

**Caution!** Material may be slippery when spilt. Walk cautiously. Ventilate area. Wear protective equipment to prevent skin and eye contact, as outlined under personal protection in this MSDS. Use absorbent (vermiculite or other inert material) and place on top of spill, then shovel up and seal in properly labeled containers for disposal.

### 7. HANDLING AND STORAGE

Avoid generating mists. Store in a cool place and out of direct sunlight. Store away from strong acids. Keep containers closed, when not using the product. Store at 2-30°C and the reagent will be stable until the expiry date stated on the bottle and kit box labels. Store in original packages as approved by manufacturer.

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### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### Exposure Standards

No exposure standards are available for this product, however, the following exposure standards have been assigned by the National Occupational Health & Safety Commission (NOHSC) to the following components of the product:

#### **POTASSIUM HYDROXIDE**

(Worksafe Australia)

[TWA]2 mg/m<sup>3</sup>

[STEL]Peak limitation

#### References: H

**Peak Limitation:** For some rapidly acting substances and irritants, the averaging of the airborne concentration over an eight hour period is inappropriate. These substances may induce acute effects after relatively brief exposure to high concentrations and so the exposure standard for these substances represents a maximum or "peak concentration" to which workers may be exposed.

#### Engineering Controls

Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate.

#### Personal Protection Equipment

**GLOVES:** The use of nitrile rubber is recommended.

**EYES:** Chemical goggles or spectacles to protect eyes.

**RESPIRATORY PROTECTION:** Avoid breathing of mists. Select and use respirators in accordance with AS/NZS 1715/1716. The use of a dust mask (disposable) or a half-face respirator with P1 filter is recommended. Filter capacity and respirator type depends on exposure levels and type of contaminant. If entering spaces where the airborne concentration of a contaminant is unknown then the use of a Self-contained breathing apparatus (SCBA) with positive pressure air supply complying with AS/NZS 1715 / 1716, or any other acceptable International Standard is recommended.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Clear liquid with no odour.
<b>Boiling Point:</b>	Not available.
<b>Freezing Point:</b>	Not available.
<b>Vapour Pressure:</b>	Not available.
<b>Specific Gravity:</b>	Not available.
<b>Flash Point:</b>	Not applicable.
<b>Flammability Limits:</b>	Not applicable.
<b>Solubility in Water:</b>	Completely miscible.

#### Other Properties

**pH:** Not available

### 10. STABILITY AND REACTIVITY

#### STABILITY:

Stable under normal conditions of use.

#### HAZARDOUS DECOMPOSITION PRODUCTS:

Emits smoke and fumes when heated to decomposition.

#### HAZARDOUS POLYMERIZATION:

Will not occur.

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### 10. STABILITY AND REACTIVITY (cont)

**INCOMPATIBILITIES:**

Strong acids and oxidizing agents.

**CONDITIONS TO AVOID:**

High temperatures and incompatibles.

### 11. TOXICOLOGICAL INFORMATION

There is no toxicological information available for this product.

**Potassium hydroxide:**

Lethal dose (rabbits, oral): 500 mg/kg.

Irritant dose (rabbits, dermal): 50 mg/24 hour - severe skin irritant.

Irritant dose (rabbits, ocular): 50 ug/24 hour - severe eye irritant.

According to OECD Guideline for the Testing of Chemicals (OECD 405) for eye corrosion and OECD Guideline for the Testing of Chemicals (OECD 404) for skin corrosion, both test procedures have been utilized to determine that potassium hydroxide is a confirmed corrosive substance.

This product contains significantly less of potassium hydroxide than is required for reporting according to Worksafe Australia, it is in ThermoTraces belief that due to the high pH of the product that irritation and possible long term injury may occur to the eyes.

### 12. ECOLOGICAL INFORMATION

No ecological information available for this product. Do not dispose of large quantities to waterways, drains or sewers.

### 13. DISPOSAL CONSIDERATIONS

Refer to appropriate authority in your State. Normally suitable for disposal by approved waste disposal agent.

### 14. TRANSPORT INFORMATION

**UN Number:** None allocated

**Proper Shipping Name:** NONE ALLOCATED

**Dangerous Goods Class:** None allocated

**Subsidiary risk:** None allocated

**Packing Group:** None allocated

**Hazchem Code:** None allocated

Not classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) 6th Edition. Not classified as a Dangerous Good according to the UN, DOT(US), ICAO(IATA) or IMO(IMDG).

### 15. REGULATORY INFORMATION

**Poison Schedule:** S5

This material is a Scheduled S5 Poison and must be stored, handled and used according to the appropriate regulations.

**RISK PHRASES**

R38 Irritating to skin.

R41 Risk of serious damage to eyes.

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### 15. REGULATORY INFORMATION (cont)

#### SAFETY PHRASES

S1/2 Keep locked up and out of reach of children.

S26 In case of contact with eyes, rinse immediately with plenty of water and contact a doctor or Poisons Information Centre.

S37/39 Wear suitable gloves and eye/face protection.

S45 In case of accident or if you feel unwell, contact a doctor or Poisons Information Centre immediately and show this container or label.

### 16. OTHER INFORMATION

#### Disclaimer

This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

Our responsibility for products sold is subject to our standard terms and conditions which are available on request.

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