



Material Safety Data Sheet

ROYAL MH-30® SG

Version: 1.3

Revision Date: 07/27/2010

Print Date: 10/24/2012

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: *ROYAL MH-30® SG*

Product Use Description: Plant growth regulator

Company: Chemtura Corporation
199 Benson Road
Middlebury, CT
06749
United States of America

Telephone: 866-430-2775

Emergency telephone: CHEMTREC: (24 hours) 800-424-9300
:
Chemtura Corporation Emergency Response: CHEMTURA : 800-292-5898

For additional emergency telephone numbers see section 16 of the Safety Data Sheet.

Prepared by: Product Safety Department
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+011-886-2-2712-5668 MSDSRequest@chemtura.com

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

CAUTION!

Form: granular Colour: light brown Odour: odourless

Hazard Summary :
May be harmful if absorbed through skin.
Causes eye irritation.
May cause skin irritation.



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OSHA Hazards

: THIS MATERIAL IS HAZARDOUS UNDER THE CRITERIA OF THE FEDERAL OSHA HAZARD COMMUNICATION STANDARD 29CFR 1910.1200.

Potential Health Effects

Primary Routes of Entry

: Skin contact
Eye contact
Inhalation

Aggravated Medical Condition Inhalation

: None known.
: No adverse effects are expected under normal conditions of use.

Skin

: May irritate skin.

Eyes

: Irritating to eyes.

Ingestion

: May cause:
Gastrointestinal irritation

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

| Component | CAS-No. | Weight percent |
|--|------------|----------------|
| pyridazine-3,6-diol | 123-33-1 | 60 % |
| Alcohols, C11-14-iso-, C13-rich, ethoxylated | 78330-21-9 | < 15 % |
| potassium hydroxide | 1310-58-3 | < 2 % |

Ingredients not precisely identified are non-hazardous and/or proprietary.

SECTION 4. FIRST AID MEASURES

First aid procedures

Inhalation

: Remove to fresh air.
If symptoms persist, call a physician.

Skin contact

: Wash off with warm water and soap.
If symptoms persist, call a physician.
Wash clothing before reuse.



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Eye contact : Rinse thoroughly with plenty of water, also under the eyelids.
If symptoms persist, call a physician.

Ingestion : Do NOT induce vomiting.
Rinse mouth with water.
Obtain medical attention.
Never give anything by mouth to an unconscious person.

SECTION 5. FIRE-FIGHTING MEASURES

Flammable properties

Flash point : 199 °F (93 °C)

Fire fighting

Suitable extinguishing media : Carbon dioxide (CO₂)
Dry powder
Foam
Water mist

Unsuitable extinguishing media : Water spray

Further information : Use water spray to cool unopened containers.
Prevent fire extinguishing water from contaminating surface water or the ground water system.

Protective equipment and precautions for firefighters

Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.
Full protective flameproof clothing

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Wear suitable protective equipment.

Environmental precautions : Do not allow material to contaminate ground water system.
Do not allow uncontrolled discharge of product into the environment.

Methods for containment /
Methods for cleaning up : Sweep up and shovel into suitable containers for disposal.

SECTION 7. HANDLING AND STORAGE

Handling



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Handling procedures : Handle and open container with care.
Use only with adequate ventilation.
Avoid dust formation.
Do not get in eyes or mouth or on skin.
Wear suitable protective clothing, gloves and eye/face protection.
Wash thoroughly after handling.
Keep container closed when not in use.

Storage

Requirements for storage areas and containers : Keep containers tightly closed in a dry, cool and well-ventilated place.
Keep only in the original container.

Other data : Stable under normal conditions.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Components with workplace control parameters

| Components / CAS-No. | Value / Basis / Update | Control parameters | Further information |
|----------------------------------|------------------------------------|--------------------|---------------------|
| potassium hydroxide 1310-58-3 | C ACGIH 2007-01-01 | 2 mg/m3 | |
| | C OSHA P0 1989-01-19 | 2 mg/m3 | |

Engineering measures

Engineering measures : Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Eye protection : Safety glasses with side-shields conforming to EN166

Hand protection : Chemical resistant protective gloves

Skin and body protection : Long sleeved clothing
Remove and wash contaminated clothing before re-use.

Respiratory protection : In the case of dust or aerosol formation use respirator with an approved filter.



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Dust safety masks are recommended when the dust concentration is more than 10 mg/m³.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
Avoid contact with skin, eyes and clothing.
Wear suitable gloves and eye/face protection.
When using do not eat, drink or smoke.
Wash thoroughly after handling.
Keep working clothes separately.
Remove and wash contaminated clothing before re-use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form : granular
Colour : light brown
Odour : odourless

Safety data

Flash point : 199 °F (93 °C)
pH : 7.8 - 11
Melting point/range : Note: no data available
Density : 1.6 g/cm³
Water solubility : Note: soluble

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid : Remarks: Extremes of temperature and direct sunlight.

Materials to avoid : Remarks: Strong acids and strong bases
Oxidizing agents

Hazardous decomposition products : Note: Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).



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SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity
pyridazine-3,6-diol : LD50: > 5,000 mg/kg
Species: rat

potassium hydroxide : LD50 Oral: 273 mg/kg
Species: rat

Acute inhalation toxicity
pyridazine-3,6-diol : LC50: > 3.2 mg/l
Exposure time: 4 h
Species: rat

Acute dermal toxicity
pyridazine-3,6-diol : LD50: > 5,000 mg/kg
Species: rabbit

Skin irritation
pyridazine-3,6-diol : Species: rabbit
Result: No skin irritation

Eye irritation
pyridazine-3,6-diol : Species: rabbit
Result: No eye irritation

Sensitisation
pyridazine-3,6-diol : Buehler Test
Species: guinea pig
Result: Did not cause sensitization on laboratory animals.
Method: OECD Test Guideline 406

CMR effects
pyridazine-3,6-diol : Carcinogenicity: Animal testing did not show any carcinogenic effects.
Mutagenicity: Animal testing did not show any mutagenic effects.
Teratogenicity: No effects on or via lactation
Reproductive toxicity: No toxicity to reproduction

12. ECOLOGICAL INFORMATION



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Toxicity to fish
pyridazine-3,6-diol

: LC50: 1,434.8 mg/l
Exposure time: 96 h

Species: Oncorhynchus mykiss (rainbow trout)
static test

Toxicity to daphnia and other aquatic invertebrates.

pyridazine-3,6-diol

: LC50: 107.5 mg/l
Exposure time: 48 h

Species: Daphnia magna (Water flea)
static test

Toxicity to algae
pyridazine-3,6-diol

: EC50: > 100 mg/l
Exposure time: 96 h

Species: Chlorella vulgaris (Fresh water algae)

Toxicity to daphnia and other aquatic invertebrates. (Chronic toxicity)

pyridazine-3,6-diol

: NOEC: > 5.6 mg/l
Exposure time: 7 d

Species: Daphnia

Further information on ecology

SECTION 13. DISPOSAL CONSIDERATIONS

Further information

: Dispose of waste material in compliance with all federal, state, and local regulations.

Waste must be classified and labelled prior to recycling or disposal.

Do not contaminate ponds, waterways or ditches with chemical or used container.

SECTION 14. TRANSPORT INFORMATION

DOT

Not dangerous goods

TDG

Not dangerous goods

IATA

Not dangerous goods



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IMDG

Not dangerous goods

RID

Not dangerous goods

SECTION 15. REGULATORY INFORMATION

OSHA Hazards : This material is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

SARA 311/312 Hazards : Acute Health Hazard

The components of this product are reported in the following inventories:
REACH

TSCA

All substances in this product are exempt from TSCA as this product is registered under FIFRA (Federal Insecticide Fungicide Rodenticide Act).
Note: EPA Registered Pesticide

DSL

Note: This product is registered under the Pest Control Products Act and is therefore exempt from WHMIS supplier labeling and MSDS requirements. Please read entire MSDS and product label for safety precautions.

SECTION 16. OTHER INFORMATION

Further information



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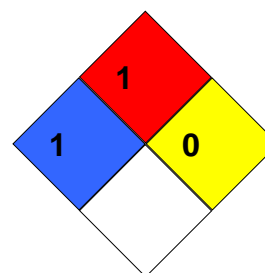
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HMIS Classification : Health hazard: 1
Flammability: 1
Reactivity: 0

NFPA Classification : Health hazard: 1
Fire Hazard: 1
Reactivity Hazard: 0



Other Emergency Phone Number

| | | |
|-----------------------|---------------------|---------------------|
| <u>Latin America:</u> | Brazil | +52 113 711 91 44 |
| | All other countries | +44 (0)208 762 8322 |
| <u>Mexico:</u> | | +52 555 004 87 63 |

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