



Material Safety Data Sheet

ROYAL MH-30 XTR

Version: 1.

Revision Date: 06/03/2010

Print Date: 06/04/2010

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: *ROYAL MH-30 XTR*
Product Use Description: Plant growth regulator

Synonyms: Aqueous KMH solution

Registration number: PCP# 29607

Company: Chemtura Canada Co./Cie
25 ERB STREET
Elmira, Ontario
N3B 3A3
Canada

Emergency telephone: :
: 866-744-3060
CANUTEC: (24 hours) 613-996-6666 (call collect)

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

Prepared by: Product Safety Department
(US) +1 866-430-2775
+011-886-2-2712-5668 MSDSRequest@chemtura.com

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

CAUTION!

Form: liquid Colour: light yellow Odour: sweet

WHMIS Classification : : This product is registered under the Pest Control Products Act and is therefore



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exempt from WHMIS supplier labeling and MSDS requirements. Please read entire MSDS and product label for safety precautions.

Potential Health Effects

- Primary Routes of Entry : Skin contact
- Aggravated Medical Condition : None known.
- Inhalation : No adverse effects are expected under normal conditions of use.
- Skin : May cause mild irritation of the skin.
May be harmful if absorbed through skin.
- Eyes : Causes serious eye irritation.
- Ingestion : No evidence of adverse effects from available information.

Environmental Effects

- Environmental Effects : Toxic to aquatic organisms.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

Component	CAS-No.	Weight percent
1,2-dihydropyridazine-3,6-dione, monopotassium salt	28382-15-2	25 - 35 %

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

SECTION 4. FIRST AID MEASURES

First aid procedures



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- Inhalation** : Remove to fresh air.
If breathing is difficult, administer oxygen.
If breathing has stopped, give artificial respiration.
Obtain medical attention for any breathing difficulties.
- Skin contact** : Remove contaminated clothing and shoes.
Wash off with warm water and soap.
Wash clothing before reuse.
If symptoms persist, call a physician.
- Eye contact** : Immediately flush eyes with water and continue washing for at least 15 minutes.
Obtain medical attention.
- Ingestion** : Do NOT induce vomiting.
If victim is fully conscious, give a cupful of water.
Do not give milk, oily products, fat or alcohol.
Get medical attention immediately.
Never give anything by mouth to an unconscious person.

SECTION 5. FIRE-FIGHTING MEASURES

Flammable properties

- Flash point** : > 212 °F (100 °C)
- Ignition temperature** : 784.8 °F (418.2 °C)

Fire fighting

- Suitable extinguishing media** : Extinguishing media - large fires
Alcohol-resistant foam
Small fires:
Carbon dioxide (CO₂)
Dry chemical
Water spray



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Unsuitable extinguishing media : Water spray jet

Further information : Fight fires from a safe distance.
Move containers from fire area if possible.
Use water spray to cool unopened containers.
Do not discharge extinguishing waters into streams, rivers and lakes.

Protective equipment and precautions for firefighters

Special protective equipment for fire-fighters : Body covering protective clothing, full "turn-out" gear.
Self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Evacuate unnecessary personnel.
Wear suitable protective clothing, gloves and eye/face protection.
Ventilate closed space before entering.

Environmental precautions : Product is soluble in water.
May be harmful to aquatic life.
Prevent from entering sewer system, surface water or soil.

Methods for containment / Methods for cleaning up : Dam up.
Absorb on inert material such as sand, earth, vermiculite.
Collect for disposal.
Large spills should be collected mechanically (remove by pumping) for disposal.
Pump excess material into suitable container (metal drums, metal tank, or such).
Observe government regulations.

Additional advice : Keep in properly labelled containers.
Dispose of rinse water as waste water.



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SECTION 7. HANDLING AND STORAGE

Handling

- Handling procedures :
- Use plant protection products safely. Always read the label and product information before use.
 - Do not puncture, drag or slide container.
 - Use with adequate ventilation.
 - Avoid contact with skin, eyes and clothing.
 - Do not breathe vapours or spray mist.
 - Wear personal protective equipment.
 - Wash thoroughly after handling.
 - Do not handle until all safety precautions have been read and understood.

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 at normal ambient temperature and pressure.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Contains no substances with occupational exposure limit values.

Engineering measures

- Engineering measures :
- Use mechanical ventilation for general area control.
 - Ensure that extracted air cannot be returned to the workplace through the ventilation system.
 - Ensure that eyewash stations and safety showers are close to the workstation location.



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Personal protective equipment

- Eye protection : Safety glasses with side-shields
or
Safety goggles
- Hand protection : Chemical resistant protective gloves
- Skin and body protection : Long sleeved clothing
To protect against splashes from pouring:
Rubber or plastic boots
Rubber or plastic apron
Remove and wash contaminated clothing before re-use.
- Respiratory protection : Breathing apparatus needed only when aerosol or mist is formed.
In the case of vapour formation use a respirator with an approved filter.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
Ensure adequate ventilation, especially in confined areas.
Avoid contact with skin, eyes and clothing.
Wear suitable gloves and eye/face protection.
Do not eat, drink or smoke when using this product.
Wash thoroughly after handling.
Keep working clothes separately.
Remove and wash contaminated clothing before re-use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

- Form : liquid
- Colour : light yellow
- Odour : sweet



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Safety data

Flash point	: > 212 °F (100 °C)
Ignition temperature	: 784.8 °F (418.2 °C)
pH	: 7.8 Note: 1% Solution
Melting point/range	: Note: Not Available
Boiling point/boiling range	: Note: Not Available
Vapour pressure	: Note: Not Available
Density	: 1.137 g/cm ³ at 68 °F (20 °C)
Water solubility	: Note: soluble

SECTION 10. STABILITY AND REACTIVITY

Materials to avoid	: Remarks: Strong oxidizing agents Strong acids and strong bases
Hazardous decomposition products	: Note: Carbon oxides nitrogen oxides (NO _x) Thermal decomposition can lead to release of irritating gases and vapours.
Hazardous reactions	: Hazardous polymerisation does not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	: LD50 Oral: > 5,000 mg/kg
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Species: rat

Acute inhalation toxicity : LC50: > 6.6 mg/l
Exposure time: 4 h
Species: rat

Acute dermal toxicity : LD50 Dermal: > 2,000 mg/kg
Species: rabbit

Skin irritation : Species: rabbit
Result: Mild skin irritation

Eye irritation : Species: rabbit
Result: Severe irritation

Sensitisation : Species: guinea pig
Result: Did not cause sensitization on laboratory animals.

Toxicology Assessment

CMR effects : Carcinogenicity:
Animal testing did not show any carcinogenic effects.
Mutagenicity:
Animal testing did not show any mutagenic effects.
Teratogenicity:
Animal testing did not show any effects on foetal development.
Reproductive toxicity:
Animal testing did not show any effects on fertility.



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12. ECOLOGICAL INFORMATION

Toxicity to fish

1,2-dihydropyridazine-3,6-
dione, monopotassium salt : LC50: > 1,000 mg/l
Exposure time: 96 h

Species: *Oncorhynchus mykiss* (rainbow trout)

Toxicity to daphnia and other aquatic invertebrates.

1,2-dihydropyridazine-3,6-
dione, monopotassium salt : LC50: > 1,000 mg/l
Exposure time: 48 h

Species: *Daphnia magna* (Water flea)

Toxicity to algae

1,2-dihydropyridazine-3,6-
dione, monopotassium salt : IC50: > 100 mg/l
Exposure time: 72 h

Species: Algae

IC50: > 9.84 mg/l

Exposure time: 5 d

Species: Freshwater algae

Further information on ecology

Additional ecological information : We have no quantitative data concerning the ecological effects of this product.

Information refers to the main component.

SECTION 13. DISPOSAL CONSIDERATIONS

Further information : Dispose of waste material in compliance with all federal, provincial and local regulations.



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Pesticide wastes are toxic.

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

SECTION 14. TRANSPORT INFORMATION

TDG

Not dangerous goods

IATA

UN-Number : 3082

Description of the goods : Environmentally hazardous substance, liquid, n.o.s.
(Maleic hydrazide)

Class : 9

Packing group : III

IMDG

Not dangerous goods

RID

Not dangerous goods

SECTION 15. REGULATORY INFORMATION

WHMIS Classification :



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

REACH The mixture contains a polymer. The monomers for this polymer have been notified.

TSCA Not On TSCA Inventory
Note: FIFRA (Federal Insecticide, Fungicide, Rodenticide Act): This product is a registered pesticide.

DSL This product contains the following components that are not on the Canadian DSL nor NDSL lists.
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.

AICS On the inventory, or in compliance with the inventory

NZIoC On the inventory, or in compliance with the inventory

ENCS Not in compliance with the inventory

ISHL Not in compliance with the inventory

KECI Not in compliance with the inventory

PICCS Not in compliance with the inventory

IECSC Not in compliance with the inventory



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This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

Ce produit a été classé selon les critères de risque du RPC et la FS contient toutes les informations exigées par le RPC.

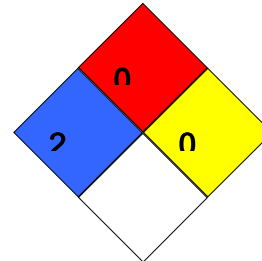
Ce produit a été classé selon les critères de risque du RPC et la FDS contient toutes les informations exigées par le RPC.

SECTION 16. OTHER INFORMATION

Further information

HMIS Classification : Health hazard: 2
Flammability: 0
Reactivity: 0

NFPA Classification : Health hazard: 2
Fire Hazard: 0
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

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is



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not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.