



# Material Safety Data Sheet

## ROYAL MH®-30 XTRA

Version: 1.9

Revision Date: 01/31/2013

Print Date: 02/06/2013

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: ROYAL MH®-30 XTRA

Product Use Description: Plant protection agent

Synonyms: Aqueous KMH solution

Chemical nature: Growth regulator

Company: Chemtura Corporation  
199 Benson Road  
Middlebury, CT  
06749  
United States of America  
  
Telephone: (US) +1 866-430-2775

Emergency telephone number: 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  
(US) +1 866-430-2775  
  
MSDSRequest@chemtura.com

### SECTION 2. HAZARDS IDENTIFICATION

#### Emergency Overview

#### CAUTION!

Form: liquid      Colour: clear colourless to light yellow      Odour: sweet

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

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



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### Carcinogenicity:

#### IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### 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.

#### NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

#### 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.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Hazardous components

Component / CAS-No.	Weight percent
1,2-dihydropyridazine-3,6-dione, monopotassium salt 28382-15-2	30.3 %
Alcohols, C11-14-iso-, C13-rich, ethoxylated 78330-21-9	< 10 %

## SECTION 4. FIRST AID MEASURES

### First aid procedures

- Inhalation : Move to fresh air.  
If not breathing, give artificial respiration.  
Call a POISON CENTER or doctor/ physician.
- Skin contact : Remove contaminated clothing and shoes.  
Wash off immediately with plenty of water for at least 15 minutes.  
Call a POISON CENTER or doctor/ physician.
- Eye contact : Hold eye open and rinse slowly and gently with water for 15-20 minutes.  
Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.  
Call a POISON CENTER or doctor/ physician.  
  
Call a POISON CENTER or doctor/ physician.
- Ingestion : Call a physician or poison control centre immediately.  
Have person sip a glass of water if able to swallow.  
If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel.  
Never give anything by mouth to an unconscious person.  
Call a POISON CENTER or doctor/ physician.

## SECTION 5. FIREFIGHTING MEASURES

### Flammable properties



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Flash point : Remarks: not applicable, (as aqueous solution)

#### Fire fighting

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

Unsuitable extinguishing media : Water spray jet

Further information : Do not discharge extinguishing waters into streams, rivers and lakes.

#### Protective equipment and precautions for firefighters

Special protective equipment for firefighters : Body covering protective clothing, full "turn-out" gear.  
Self-contained breathing apparatus (EN 133)

### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Wear suitable protective equipment.

Environmental precautions : Prevent leaks and prevent soil / water pollution caused by leaks.  
May be harmful to aquatic life.

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

### SECTION 7. HANDLING AND STORAGE

#### Handling

Handling procedures : Handle in accordance with good industrial hygiene and safety practice.  
Avoid contact with skin, eyes and clothing.  
Use with adequate ventilation.

#### Storage

Requirements for storage areas and containers : Keep in a dry, cool place.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Exposure Guidelines



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### ROYAL MH®-30 XTRA

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#### Engineering measures

#### Personal protective equipment

Eye protection : Safety glasses with side-shields

Hand protection : Impervious gloves

Skin and body protection : impervious clothing

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

Hygiene measures :

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Appearance

Form : liquid  
Colour : clear  
colourless  
to  
light yellow

Odour : sweet

#### Safety data

Flash point : Note: not applicable, (as aqueous solution)

pH : 8.5 - 9.5

Melting point/range : Note: no data available

Boiling point/boiling range : Note: no data available

Vapour pressure : no data available

Density : 1.19 g/cm<sup>3</sup>  
at 77 °F (25 °C)

Water solubility : Note: soluble

### SECTION 10. STABILITY AND REACTIVITY

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



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Hazardous decomposition products : Note: Carbon oxides  
Hazardous reactions : Hazardous polymerisation does not occur.

#### SECTION 11. TOXICOLOGICAL INFORMATION

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

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

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

Skin irritation : Species: rabbit  
Result: Mild skin irritation

Eye irritation : Species: rabbit  
Result: Severe eye irritation

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

##### Toxicology Assessment

Genotoxicity in vitro : Ames test  
negative

CMR effects : Carcinogenicity:  
negative  
Mutagenicity:  
negative  
Reproductive toxicity:  
negative

#### 12. ECOLOGICAL INFORMATION

##### Ecotoxicity effects

Toxicity to fish : LC50: > 1,000 mg/l  
Exposure time: 96 h  
Species: Oncorhynchus mykiss (rainbow trout)



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static test  
: LC50: > 104 mg/l  
Exposure time: 96 h  
  
Species: Cyprinodon variegatus (sheepshead minnow)  
flow-through test Analytical monitoring: yes

Toxicity to daphnia and other aquatic invertebrates : EC50: > 1,000 mg/l  
Exposure time: 48 h  
Species: Daphnia magna (Water flea)

Toxicity to algae : IC50: > 102 mg/l  
Exposure time: 5 d  
Species: Skeletonema costatum (marine diatom)  
static test Analytical monitoring: yes

: IC50: > 95 mg/l  
Exposure time: 5 d  
Species: Freshwater algae  
static test Analytical monitoring: yes

Toxicity to fish (Chronic toxicity) : NOEC: 120 mg/l  
Exposure time: 7 d  
Species: Danio rerio (zebra fish)

### Further information on ecology

Additional ecological information : The product itself has not been tested.  
Information refers to the main component.

## SECTION 13. DISPOSAL CONSIDERATIONS

Further information : Dispose of in accordance with local regulations.  
Dispose of wastes in an approved waste disposal facility.

## SECTION 14. TRANSPORT INFORMATION

### DOT

UN number : 3082  
Description of the goods : Environmentally hazardous substances, liquid, n.o.s.  
(Maleic hydrazide)  
Class : 9  
Packing group : III  
ERG Code : 171

### **TDG**

Not dangerous goods

### **IATA**

UN number : 3082



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

Class : 9

Packing group : III

Labels : 9

Environmentally hazardous : no

### IMDG

Not dangerous goods

### RID

Not dangerous goods

Not regulated by DOT and TDG if shipped or transported in packaging less than 8400 liters by road and/or rail.

## SECTION 15. REGULATORY INFORMATION

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

**CERCLA Reportable Quantity** :

ethylene oxide 75-21-8	10 lbs
pyridazine-3,6-diol 123-33-1	5000 lbs

**SARA 302 Reportable Quantity** :

**SARA 311/312 Hazards** : Acute Health Hazard

### EPCRA - EMERGENCY PLANNING COMMUNITY RIGHT - TO - KNOW

**SARA 302 Reportable Quantity** :

ethylene oxide 75-21-8	1000 lbs
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**SARA 304 Components** : Calculated RQ exceeds reasonably attainable upper limit.

ethylene oxide 75-21-8	10 lbs
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**California Prop. 65 Components** : WARNING! This product contains a chemical known to the State of California to cause cancer.



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Oxirane

75-21-8 ethylene  
oxide

WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Oxirane

75-21-8 ethylene  
oxide

### SECTION 16. OTHER INFORMATION

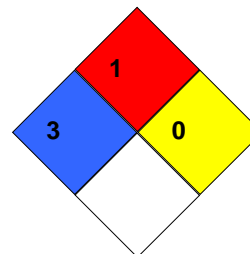
#### Further information

#### HMIS Classification

: Health hazard: 3  
Flammability: 1  
Reactivity: 0  
PPI: Ask supervisor or safety specialist for handling instructions

#### NFPA Classification

: Health hazard: 3  
Fire Hazard: 1  
Reactivity Hazard: 0



#### Other Emergency Phone Number

<u>Latin America:</u>	Brazil	+55 113 711 9144
	All other countries	+44 (0) 1235 239 670
<u>Mexico:</u>		+52 555 004 8763

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 not to be considered a warranty or quality specification. The information





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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.