

# Material Safety Data Sheet

Material Name: Ro-Neet Herbicide

MSDS ID: 74530-16

## \*\*\*Section 1 - PRODUCT AND COMPANY IDENTIFICATION\*\*\*

Material Name: Ro-Neet Herbicide

EPA Registration Number: 74530-16

### Manufacturer Information

HELM AGRO US, INC.  
8275 Tournament Drive, Ste 340  
Memphis, TN 38125,

Phone: 901-312-1525  
Fax: 901-312-1531  
Emergency # +1-800-424-9300 ChemTrec

### Product Use

Herbicide

## \*\*\*Section 2 - HAZARDS IDENTIFICATION\*\*\*

### Overview

CAUTION

### EMERGENCY OVERVIEW

**Color:** Not available

**Physical Form:** liquid

**Odor:** Not available

**Health Hazards:** Harmful if swallowed. May cause respiratory irritation. Suspected of causing cancer.

**Physical Hazards:** None known.

### POTENTIAL HEALTH EFFECTS

#### Inhalation

**Short Term:** May cause respiratory irritation.

**Long Term:** Suspected of causing cancer.

#### Skin

**Short Term:** Harmful in contact with skin.

**Long Term:** No information on significant adverse effects.

#### Eye

**Short Term:** No information on significant adverse effects.

**Long Term:** No information on significant adverse effects.

#### Ingestion

**Short Term:** May be harmful if swallowed.

**Long Term:** No information on significant adverse effects.

#### Potential Environmental Effects

Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

#### Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). This product is not a controlled product according to Canada's Controlled Product Regulations.

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## \*\*\*Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS\*\*\*

CAS	Component	Percent
1134-23-2	Cycloate	79.9
64742-94-5	Solvent naphtha, petroleum, heavy aromatic	<2
91-20-3	Naphthalene	<1
95-63-6	Benzene, 1,2,4-trimethyl-	<0.5

## \*\*\*Section 4 - FIRST AID MEASURES\*\*\*

### Inhalation

If adverse effects occur, remove to uncontaminated area. Get medical attention, if needed.

### Skin

If adverse effects occur, wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash contaminated clothing before reuse. Call a POISON CENTER or doctor/physician if you feel unwell.

### Eyes

Flush eyes with plenty of water for at least 15 minutes. Get medical attention, if needed.

### Ingestion

Rinse mouth out with water. Call a POISON CENTER or doctor/physician if you feel unwell.

## \*\*\*Section 5 - FIRE FIGHTING MEASURES\*\*\*

See Section 9 for Flammability Properties

**NFPA Ratings: Health: 1 Fire: 1 Reactivity: 0**

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

### Flammable Properties

Not flammable.

### Extinguishing Media

Use carbon dioxide, regular dry chemical, regular foam or water.

### Unsuitable Extinguishing Media

None known.

### Protective Equipment and Precautions for Firefighters

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

### Fire Fighting Measures

Use extinguishing agents appropriate for surrounding fire.

### Thermal Decomposition Products

**Combustion:** hydrocarbons, oxides of carbon

## \*\*\*Section 6 - ACCIDENTAL RELEASE MEASURES\*\*\*

### Personal Precautions

Wear appropriate personal protective equipment recommended in Section 8 of the MSDS. If release occurs in the U.S. and is reportable under CERCLA Section 103, notify the National Response Center at (800)424-8802 (USA) or (202)426-2675 (USA). Notify Local Emergency Planning Committee and State Emergency Response Commission for release greater than or equal to RQ (U.S. SARA Section 304).

### Methods for Containment

Contain the discharged material. Absorb with sand or other non-combustible material. **Large spills:** To prevent liquid from flowing into drains, completely contain spilled material with dikes, sandbags, etc.

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## Environmental Precautions

Keep out of water supplies and sewers.

## Methods for Cleanup

Stop leak if safe to do so - Prevent entry into waterways, drains, or confined areas. Absorb with earth, sand or other non-combustible material and transfer to container. Collect spilled material in appropriate container for disposal.

## \*\*\*Section 7 - HANDLING AND STORAGE\*\*\*

### Handling Procedures

Do not eat, drink, or smoke when using this product. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wash thoroughly after handling.

### Storage Procedures

Store in accordance with all current regulations and standards.

## \*\*\*Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION\*\*\*

### Component Exposure Limits

#### Naphthalene (91-20-3)

- ACGIH:** 10 ppm TWA  
15 ppm STEL  
Skin - potential significant contribution to overall exposure by the cutaneous route
- OSHA:** 10 ppm TWA; 50 mg/m<sup>3</sup> TWA
- NIOSH:** 10 ppm TWA; 50 mg/m<sup>3</sup> TWA  
15 ppm STEL; 75 mg/m<sup>3</sup> STEL
- Mexico** 10 ppm TWA LMPE-PPT; 50 mg/m<sup>3</sup> TWA LMPE-PPT  
15 ppm STEL [LMPE-CT]; 75 mg/m<sup>3</sup> STEL [LMPE-CT]

#### Benzene, 1,2,4-trimethyl- (95-63-6)

- NIOSH:** 25 ppm TWA; 125 mg/m<sup>3</sup> TWA

### Ventilation

Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

## PERSONAL PROTECTIVE EQUIPMENT

### Eyes/Face

Eye protection not required, but recommended.

### Protective Clothing

Under normal conditions of use, wear suitable clothing to prevent contact with skin. Long sleeved shirt and long pants recommended.

### Glove Recommendations

Wear appropriate gloves.

### Respiratory Protection

Where vapor concentration exceeds or is likely to exceed applicable exposure limits, a NIOSH approved respirator is required.

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## \*\*\*Section 9 - PHYSICAL AND CHEMICAL PROPERTIES\*\*\*

<b>Physical State:</b>	Liquid	<b>Appearance:</b>	Liquid
<b>Color:</b>	Not available	<b>Physical Form:</b>	liquid
<b>Odor:</b>	Not available	<b>Odor Threshold:</b>	Not available
<b>pH:</b>	6.2	<b>Melting Point:</b>	Not available
<b>Boiling Point:</b>	Not available	<b>Flash Point:</b>	>200 °F
<b>Evaporation Rate:</b>	Not available	<b>Vapor Pressure:</b>	Not available
<b>Henry's Law Constant:</b>	0.974 g/ml	<b>Vapor Density (air = 1):</b>	Not available
<b>Density:</b>	0.974 g/ml	<b>Specific Gravity (water = 1):</b>	Not available
<b>Water Solubility:</b>	Not available	<b>Coeff. Water/Oil Dist:</b>	Not available
<b>Viscosity:</b>	Not available	<b>Volatility:</b>	Not available

## \*\*\*Section 10 - STABILITY AND REACTIVITY\*\*\*

### Chemical Stability

Stable at standard temperatures and pressure.

### Conditions to Avoid

None known.

### Materials to Avoid

strong acids, strong oxidizing materials

### Decomposition Products

oxides of carbon, hydrocarbons

### Decomposition Products

**Combustion:** hydrocarbons, oxides of carbon

### Possibility of Hazardous Reactions

Will not polymerize.

## \*\*\*Section 11 - TOXICOLOGICAL INFORMATION\*\*\*

### Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

#### Cycloate (1134-23-2)

Oral: Rat LD50: 1678 mg/kg

Dermal: Rat LD50: 2467 mg/kg

Dermal: Rabbit LD50: 3 g/kg

Inhalation: Rat 1-hr LC50: 90 g/m<sup>3</sup>

#### Solvent naphtha, petroleum, heavy aromatic (64742-94-5)

Oral: Rat LD50: >5000 mg/kg

Dermal: Rabbit LD50: >2000 mg/kg

Inhalation: Rat 4-hr LC50: >590 mg/m<sup>3</sup>

#### Naphthalene (91-20-3)

Oral: Rat LD50: 490 mg/kg

Dermal: Rat LD50: >2500 mg/kg

Dermal: Rabbit LD50: >20 g/kg

Inhalation: Rat 1-hr LC50: >340 mg/m<sup>3</sup>

#### Benzene, 1,2,4-trimethyl- (95-63-6)

Oral: Rat LD50: 3400 mg/kg

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Dermal: Rabbit LD50: >3160 mg/kg

Inhalation: Rat 4-hr LC50: 18 g/m<sup>3</sup>

## Respiratory Sensitizer

Not known to be a sensitizing agent.

## Dermal Sensitizer

Not known to be a sensitizing agent.

## Carcinogenicity

See component data.

NAPHTHALENE : IARC 2B

## Component Carcinogenicity

### Naphthalene (91-20-3)

**ACGIH:** A4 - Not Classifiable as a Human Carcinogen

**NTP:** Reasonably Anticipated To Be A Human Carcinogen (Possible Select Carcinogen)

**IARC:** Monograph 82 [2002] (Group 2B (possibly carcinogenic to humans))

## Mutagenic Data

No information available for the product.

## Reproductive Effects

No information available for the product.

## \* \* \*Section 12 - ECOLOGICAL INFORMATION\* \* \*

### Ecotoxicity

Toxic to aquatic organisms. Harmful to aquatic life with long lasting effects

### Component Analysis - Aquatic Toxicity

#### Solvent naphtha, petroleum, heavy aromatic (64742-94-5)

**Fish:** 96-hr LC50 Pimephales promelas: 19 mg/l [static]  
96-hr LC50 Oncorhynchus mykiss: 2.34 mg/l  
96-hr LC50 Lepomis macrochirus: 1740 mg/l [static]  
96-hr LC50 Pimephales promelas: 45 mg/l [flow-through]  
96-hr LC50 Pimephales promelas: 41 mg/l

**Algae:** 72-hr EC50 Skeletonema costatum: 2.5 mg/l

**Invertebrate:** 48-hr EC50 Daphnia magna: 0.95 mg/l

#### Naphthalene (91-20-3)

**Fish:** 96-hr LC50 Pimephales promelas: 5.74-6.44 mg/l [flow-through]  
96-hr LC50 Oncorhynchus mykiss: 1.6 mg/l [flow-through]  
96-hr LC50 Oncorhynchus mykiss: 0.91-2.82 mg/l [static]  
96-hr LC50 Pimephales promelas: 1.99 mg/l [static]  
96-hr LC50 Lepomis macrochirus: 31.03 mg/l [static]

**Algae:** 72-hr EC50 Skeletonema costatum: 0.4 mg/l

**Invertebrate:** 48-hr LC50 Daphnia magna: 2.16 mg/l  
48-hr EC50 Daphnia magna: 1.96 mg/l [Flow through]  
48-hr EC50 Daphnia magna: 1.09 - 3.4 mg/l [static]

#### Benzene, 1,2,4-trimethyl- (95-63-6)

**Fish:** 96-hr LC50 Pimephales promelas: 7.19-8.28 mg/l [flow-through]

**Invertebrate:** 48-hr EC50 Daphnia magna: 6.14 mg/l

## \* \* \*Section 13 - DISPOSAL CONSIDERATIONS\* \* \*

### Disposal Methods

Dispose in accordance with all applicable regulations.

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## Component Waste Numbers

Naphthalene (91-20-3)

RCRA: waste number U165

### \*\*\*Section 14 - TRANSPORT INFORMATION\*\*\*

#### US DOT Information

No Classification assigned.

#### TDG Information

No Classification assigned.

### \*\*\*Section 15 - REGULATORY INFORMATION\*\*\*

#### U.S. Federal Regulations

This material contains one or more of the following chemicals required to be identified under SARA Section 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

#### Naphthalene (91-20-3)

CERCLA: 100 lb final RQ; 45.4 kg final RQ

TSCA 12b: Section 4, 0.1 % de minimus concentration

#### U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Cycloate	1134-23-2	No	No	No	Yes	No
Naphthalene	91-20-3	Yes	Yes	Yes	Yes	Yes
Benzene, 1,2,4-trimethyl-	95-63-6	No	Yes	Yes	Yes	Yes

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

WARNING! This product contains a chemical known to the state of California to cause reproductive/developmental effects.

#### Canada

D2A, D2B.

#### Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which fall under WHMIS criteria specified in the Controlled Products Regulations and present above the threshold limits listed on the IDL.

#### Benzene, 1,2,4-trimethyl- (95-63-6)

0.1 %

#### WHMIS Classification

#### Component Analysis - Inventory

Component	CAS	US	CA	EU	AU	PH	JP	KR	CN	NZ
Cycloate	1134-23-2	No	No	EIN	No	No	No	No	No	No
Solvent naphtha, petroleum, heavy aromatic	64742-94-5	Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	Yes
Naphthalene	91-20-3	Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	Yes
Benzene, 1,2,4-trimethyl-	95-63-6	Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	Yes

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## \*\*\*Section 16 - OTHER INFORMATION\*\*\*

### Summary of Changes

Revision 1.0000, 2nd October: New SDS.

### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CPR - Controlled Products Regulations; DOT - Department of Transportation; DSL - Domestic Substances List; EPA - Environmental Protection Agency; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit

### Other Information

SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE, except that the product shall conform to contracted specifications, and that the product does not infringe any valid United States or Canadian patent. No claim of any kind shall be greater in amount than the purchase price of the quantity of product in respect of which damages are claimed. In no event shall Seller be liable for incidental or consequential damages, whether Buyer's claim is based on contract, breach of warranty, negligence or otherwise.

End of Sheet 74530-16