MATERIAL SAFETY DATA SHEET FLAT TOP MC

Direct Ag Source, LLC

Emergency Phone: Chemtrec 800-424-9300

Effective Date: 12-4-07

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT NAME: Flat Top MC EPA Registration Number: 83222-22

COMPANY IDENTIFICATION: Direct Ag Source, LLC

30473 260th St. Eldora, IA 50627

2. COMPOSITION / INFORMATION ON INGREDIENTS:

Active IngredientsCAS No.% CompositionMepiquat Chloride24307-26-44.2%

Chemical Name: 1,1-Dimethyl-piperidinium chloride

Chemical Formula: C₇H₁₆ClN

3. HAZARD IDENTIFICATION

POTENTIAL HEALTH HAZARDS:

EYE – Causes moderate eye irritation.

SKIN – Harmful if absorbed through skin.

4. FIRST AID

IF IN EYES: 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 control center or doctor for treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

NOTE TO PHYSICIAN: No known antidote. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flashpoint (PMA-4): Will not flash. **Flammable Limits (LFL-UFL):** N/A

Fire and Explosion Hazards: None.

Means of Extinction: Use foam, dry chemical, carbon dioxide or water spray.

Fire Fighting Instructions: Evacuate nonessential personnel from the area and fight fire from upwind to prevent exposure to fire, smoke, fumes or products of combustion. Foam or dry chemical extinguishing systems are recommended. Water runoff may cause environmental damage and if water is used to fight a fire, dike and collect the runoff.

Firefighting Equipment: Self-contained breathing apparatus with full face piece and full bunker gear.

Hazardous Combustion Products: Thermal decomposition or combustion may produce hydrogen chloride and / or oxides of nitrogen and hydrogen.

6. ACCIDENTAL RELEASE MEASURES

Control the spill at its source and contain the spill to prevent it from spreading or contaminating soil or from entering sewer and drainage systems or any body of water. Clean up spills immediately, observing the precautions outlined in Section 8 below.

Small Spills: Cover the entire spill with absorbing material and place into an appropriate disposal container. Rinse the area with water and pick up the rinse liquid with additional absorbent material and place into an appropriate disposal container. Once all material is cleaned up and placed in a disposal container, seal the container and arrange for disposal.

Large Spills: Dike large spills using absorbent or impervious material such as clay or sand. Recover and contain as much free liquid as possible for reuse. Allow any absorbed material to solidify and scrape up for disposal. After removal, flush contaminated area thoroughly with water, pick up wash liquid with additional absorbent material, and place in a disposal container.

7. HANDLING AND STORAGE

Keep out of reach of children and animals. Store in a well ventilated, cool, dry location and avoid excessive heat. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

Use only in a well ventilated area and wash thoroughly after handling this product.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Applicators and other Handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as nitrile, butyl, neoprene or barrier laminate
- Shoes plus socks

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this products concentrate. Do not reuse them.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Pale pink liquid

pH: 7.0 - 8.0

Boiling Point: 212°F **Freezing Point:** 0°F **Specific Gravity:** 1.0 g/ml Solubility: Water soluble

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Temperatures above 125°F and below 30°F.

CHEMICAL STABILITY: Product is normally stable but may decompose if heated.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition or combustion may produce hydrogen chloride and / or oxides of nitrogen and hydrogen.

POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

ACUTE ORAL TOXICITY

Oral LD₅₀ (rat, female): > 5,000 mg/kg

ACUTE DERMAL TOXICITY

Dermal LD₅₀ (rat): > 2,000 mg/kg

ACUTE INHALATION TOXICITY

Inhalation LC₅₀ (rat): > 4.0 mg/L

EYE IRRITANT

Rabbit – Moderately irritating

SKIN IRRITATION

Rabbit – Slightly irritating

SENSITIZATION

Guinea pig – Not a Contact Sensitizer

CARCINOGENICITY:

ACGIH: Not listed IARC: Not listed NTP: Not listed OSHA: Not listed

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS: Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater.

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Triple rinse (or equivalent) and then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

14. TRANSPORT INFORMATION

DOT PROPER SHIPPING NAME: Not Regulated by DOT

DOT HAZARD CLASS OR DIVISION: N/A

DOT UN/NA NUMBER: N/A
DOT PACKING GROUP: N/A
REPORTABLE QUANTITY: N/A
MARINE POLLUTANT: Not Listed

15. REGULATORY INFORMATION

FIFRA -

All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act. The regulatory information presented below is pertinent only when this product is handled outside of the normal use and application as a pesticide.

OSHA HAZARD COMMUNICATION STANDARD STATUS: Not Regulated

SARA Title III – Section 302 Extremely Hazardous Substances

Not listed

SARA Title III – Section 311/312 Hazard Categories

None

SARA Title III – Section 312 Threshold Planning Quantity

The threshold planning quantity (TPQ) for this product treated as a mixture is 10,000 lbs. This product contains no ingredients with a TPQ of less than 10,000 lbs.

SARA Title III – Section 313 Reportable Ingredients

None

CERCLA -

Not Listed.

CALIFORNIA PROP 65 STATUS -

Not listed

16. OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by CPR.

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