

## **MATERIAL SAFETY DATA SHEET**

### **SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**COMPANY ADDRESS:**

ALBAUGH, INC.  
Ankeny, IA 50021

**EMERGENCY TELEPHONE NUMBERS:**

(800) 424-9300 (CHEMTREC, transportation and spills)

**PRODUCT NAME** : MEP STAR  
**CHEMICAL NAME** : N,N-dimethylpiperidinium Chloride  
**CHEMICAL FAMILY** : Quaternary ammonium salt  
**PRODUCT CODE** : EPA Reg. No. 42750-74

### **SECTION 2 - COMPOSITION, INFORMATION OF INGREDIENTS**

COMPONENT	PERCENTAGE	CAS NUMBER	OSHA PEL	ACIGH TLV
Mepiquat Chloride	4.2	15302-91-7	Not listed	Not listed

### **SECTION 3 - HAZARDS IDENTIFICATION SUMMARY**

(As defined by OSHA Hazard Communication Standard, 29 CFR 1910.1200)

**HEALTH HAZARDS:** Mildly irritating to the eyes.

**PHYSICAL HAZARDS:** None known.

**ENVIRONMENTAL HAZARDS:** None known.

### **SECTION 4 - FIRST AID MEASURES**

**IF SWALLOWED:** Drink 1 to 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person. Call physician or the Poison Control Center.

**IF IN EYES:** In case of contact, immediately flush with plenty of water. Get medical attention if irritation persists.

**IF INHALED:** Remove from contaminated area. Observe victim closely. If irritation develops, get medical attention.

**IF ON SKIN:** Remove contaminated clothing. Wash with soap and water. Call a physician if irritation develops.

**NOTE TO PHYSICIAN:** Treat symptomatically.

### **SECTION 5 - FIRE FIGHTING MEASURES**

**FLASHPOINT (method):** Will not flash.

**FLAMMABLE LIMITS (LFL-UFL):** Not applicable.

**FIRE AND EXPLOSION HAZARD:** None.

**EXTINGUISHING MEDIA:** Use foam, dry chemical, carbon dioxide, or water spray when fighting fires involving this material.

**FIGHTING INSTRUCTIONS:** Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Foam or dry chemical extinguishing systems recommended to prevent environmental damage due to water run off.

**FIREFIGHTING EQUIPMENT:** Self-contained breathing apparatus with full facepiece. Full firefighting turn-out gear (Bunker gear).

**HAZARDOUS COMBUSTION PRODUCTS:** Hydrogen chloride, Oxides of nitrogen and hydrogen.

## **SECTION 6 - ACCIDENTAL RELEASE MEASURES**

Clean up spills immediately, observing precautions in Section 8 of this document. Isolate hazard area. Keep unnecessary personnel from entering.

**SMALL SPILL:** Absorb small spills on sand, vermiculite or other inert absorbent. Place contaminated material in appropriate chemical waste for disposal. Rinse area with water and place rinsate in chemical waste container for disposal.

**LARGE SPILL:** 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 and place in a disposable container.

## **SECTION 7 - HANDLING AND STORAGE**

**HANDLING:** Use only in a well-ventilated area. Do not reuse this container.

**STORAGE:** Keep container closed when not in use. Keep away from food, feed and drinking water. Store in a well ventilated, dry place away from heat. Store above 32 F to keep from freezing.

## **SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION**

**EXPOSURE LIMITS (8 HOUR TWA):** (Refer to Section 3)

**ENGINEERING CONTROLS:** Proper ventilation is required when handling or using this product. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

### **PERSONAL PROTECTIVE EQUIPMENT:**

EYE PROTECTION - Safety glasses.

CLOTHING - Long-sleeved shirt and long pants. Shoes plus socks.

GLOVES - Waterproof gloves.

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

### **USER SAFETY RECOMMENDATIONS:**

1. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
2. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

## **SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

**PHYSICAL DESCRIPTION:** Reddish pink liquid.

**ODOR:** No appreciable.

**SPECIFIC GRAVITY:** 1.01 g/mL @ 20 C (8.43 lb/gal)

**pH:** 7.0 – 8.0

**VAPOR PRESSURE:** Unknown

**VAPOR DENSITY:** Unknown

**WATER SOLUBILITY:** Soluble

## **SECTION 10 - STABILITY AND REACTIVITY**

**CHEMICAL STABILITY:** Stable, however may decompose if heated.

**CONDITIONS TO AVOID:** Temperatures above 125°F (50°C) and below 30°F (0°C).

**INCOMPATIBILITY WITH OTHER MATERIALS:** None known.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Hydrogen chloride, oxides of hydrogen and nitrogen.

**HAZARDOUS POLYMERIZATION:** Product will not undergo polymerization.

## **SECTION 11 - TOXICOLOGICAL INFORMATION**

### **ACUTE TOXICITY:**

Oral LD <sub>50</sub> (rat)	-	> 5,000 mg/Kg
Dermal LD <sub>50</sub> (rat)	-	> 2,000 mg/Kg
Inhalation LC <sub>50</sub> (rat)	-	> 4.0 mg/L
Eye Irritation (rabbit)	-	Slight
Skin Irritation (rabbit)	-	Slight
Sensitization (guinea pig)-		Non-sensitizer

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** None known.

### **CARCINOGEN STATUS:**

OSHA	-	Not listed.
NTP	-	Not listed.
IARC	-	Not listed.

**MUTAGENIC DATA:** No evidence of effects during *in vivo* or *in vitro* studies.

## **SECTION 12 - ECOLOGICAL INFORMATION**

**ENVIRONMENTAL SUMMARY:** Do not apply directly to water, to areas where surface water is present. Do not contaminate water when disposing of rinsate or equipment washwater. Do not contaminate water by cleaning of equipment

### **FISH TOXICITY:** (Technical)

96 hour LC<sub>50</sub>, Rainbow trout - 4,300 ug/L  
 96 hour LC<sub>50</sub>, Bluegill - unknown

### **AVIAN TOXICITY:** (Technical)

Oral LD<sub>50</sub>, Bobwhite quail - >2,000 mg/Kg  
 Oral LD<sub>50</sub>, Mallard duck - >2,000 mg/Kg

**BEE TOXICITY:** Non toxic.

## **SECTION 13 - DISPOSAL CONSIDERATIONS**

Do not contaminate water, food, or feed by storage or disposal.

**WASTE:** Pesticide wastes are toxic. Dispose of in accordance with applicable Federal, state and local laws and regulations at an approved facility.

**CONTAINER:** Triple rinse (or equivalent). Then offer for recycling, 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.

**SECTION 14 - TRANSPORT INFORMATION**

**DOT SHIPPING DESCRIPTION:** Not regulated by DOT

**DOT HAZARD CLASS:** N/A

**UN NUMBER:** N/A

**DOT PACKING GROUP:** N/A

**DOT PRIMARY/SECONDARY LABEL:** N/A

**DOT PRIMARY/SECONDARY PLACARD:** N/A

**DOT EMERGENCY RESPONSE GUIDE #:** N/A

**SECTION 15 - REGULATORY INFORMATION**

**CERCLA REPORTABLE QUANTITY:** Not listed

**SARA TITLE III STATUS:**

311/312 Hazard Categories - None

313 Toxic Chemicals - None known

**CALIFORNIA PROP 65:** Not listed

**SECTION 16 - OTHER INFORMATION**

HMIS HAZARD RATINGS	HEALTH	1
	FLAMMABILITY	0
	PHYSICAL HAZARD	1
	4=Severe 3=Serious 2=Moderate 1=Slight 0=Minimal	

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