

MATERIAL SAFETY DATA SHEET

MONTAR

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Issue Date: 10/99

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Chemical Product

MONTAR

EPA Reg. No. 17545-3

Common Name: Liquid organo-arsenical herbicide.

Chemical Description: Sodium Cacodylate/Cacodylic Acid, aqueous solution.

TSCA/CAS No.: This product is a mixture — there is no specific CAS number.

Manufactured For

Monterey Chemical Company

P. O. Box 35000

Fresno, CA 93745-5000

Emergency Phone Numbers

Emergency Telephone: DAYS: (559) 499-2100 EVES.: (559) 431-7390

CHEMTREC (24-Hour Emergency Number): (800) 424-9300

EPA National Response Center: (800) 424-8802

SECTION 2. HAZARDOUS INGREDIENTS

CHEMICAL	CAS NO.	%	TLV OR PEL	RQ (lbs)
Sodium cacodylate	124-65-2	23.4	N.P.*	N.P.
Cacodylic acid	75-60-5	4.0	N.P.	1.0

(Total arsenic, as elemental, 13.2% all in water soluble form.)

* N.P. - Not pertinent.

SECTION 3. EMERGENCY/HAZARDS OVERVIEW

Odorless, clear, pale amber liquid. Poisonous if swallowed or inhaled. Causes eye irritation. Fire produces poisonous gases. Stay upwind of smoke. Toxic to fish, birds, wildlife and plants. Contain any liquid runoff. Prop. 65 hazardous material. Also, product contains priority pollutant (cacodylic acid). Spills of more than 2.4 gallons of MONTAR exceed the Reportable Quantity of cacodylic acid and must be reported. See D.O.T. Emergency Response Guide #31.

HEALTH: 1 REACTIVITY: 0 FLAMMABILITY: 0 ENVIRONMENT: 2
(0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme)

SECTION 4. FIRST AID

Eyes: Flush with plenty of water. Get medical attention if irritation persists.

Skin: Wash thoroughly with soap and water. Get medical attention if irritation persists.

Ingestion: Call a physician immediately. Drink 1 or 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.

Note to Physician: If ingested, gastric lavage may be indicated. Chelation Therapy with BAL or D-penicillamine has been recommended in the literature of symptomatic arsenic poisoning. Persons allergic to penicillin may suffer reaction to D-penicillamine and, therefore, should be treated with BAL only.

Inhalation: Remove victim to fresh air. Apply artificial respiration, preferably by mouth to mouth, if indicated.

SECTION 5.	FIRE AND EXPLOSION HAZARDS
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Flash Point:	> 200°F.
Test Method:	Not pertinent.
LEL Flammable Limits:	Not pertinent.
UEL Flammable Limits:	Not pertinent.
Autoignition Temperature:	Not pertinent.
Flammability Classification:	Noncombustible.
Known Hazardous Products of Combustion:	Thermal decomposition may produce poisonous, arsenic-containing fumes.
Properties that Initiate/Contribute to Intensity of Fire:	None.
Potential For Dust Explosion:	None.
Reactions that Release Flammable Gases or Vapors:	None known.
Potential For Release of Flammable Vapors:	None.
Unusual Fire & Explosion Hazards:	Poisonous, arsenic-containing fumes may be produced.
Extinguishing Media:	Not pertinent. Avoid use of water or foam to prevent spread of contamination.
Special Firefighting Procedures:	Stay upwind of smoke. Wear positive pressure, self-contained breathing apparatus and goggles. Contain any liquid runoff.

SECTION 6.	SPILLS AND LEAKS
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Containment:	This product is toxic to fish, birds, wildlife and plants. Prevent product spillage from entering drinking water supplies or streams.
Clean Up:	Collect liquid or absorb onto absorbent material and package for disposal according to local, state and federal regulations.
Evacuation:	Not necessary but restrict entry.
Reporting:	Spills of more than 2.4 gallons of MONTAR exceed the RQ for cacodylic acid and must be reported as a priority pollutant under the CERCLA spill reporting requirements.

SECTION 7.	STORAGE AND HANDLING
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Storage:	Store in plastic or stainless steel container in a cool, well-ventilated, dry place at temperatures above 40°F. Do not store in contact with aluminum, copper, tin, zinc or galvanized metals. Do not contaminate water, food, feeds, seeds, fertilizers, insecticides or fungicides. Do not stack pallets more than two (2) high.
Transfer Equipment:	Transfer product using chemical-resistant plastic or stainless steel tanks, pumps, valves, etc.
Work/Hygienic Practices:	Harmful if swallowed or inhaled. Avoid breathing spray mist. Avoid contact with eyes, skin, or clothing. Causes eye irritation. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Keep children and domestic animals off treated areas until washed into the soil. Avoid contamination of feed or food products.

SECTION 8. PERSONAL PROTECTIVE EQUIPMENT

Eyes: Protective eyewear.
Skin: Long sleeved shirt, long pants, waterproof gloves and shoes plus socks.
Respiratory: Flagmen, pilots and ground spray applicators: Use NIOSH-approved dust/mist respirator (such as 3M #8710).
Ventilation: Recommended but no TLV established.

SECTION 9. PHYSICAL AND CHEMICAL DATA

Appearance: Clear, pale amber liquid.
Odor: None.
pH: 6.0
Vapor Pressure: 15 mm Hg.
Vapor Density (Air = 1): Not available.
Boiling Point: 104°C (219°F)
Freezing Point: 10°C
Water Solubility: Completely miscible.
Density: 10.26 - 10.68 lbs./gal.
Evaporation Rate (butyl acetate = 1): 0.7
Viscosity: Not available.
% Volatile: 62% (water)
Octanol/Water Partition Coefficient: Not available.
Saturated Vapor Concentration: Not available.

SECTION 10. STABILITY AND REACTIVITY

Stability: Stable.
Conditions To Avoid: Contact with acids, nascent hydrogen, aluminum, copper, tin, zinc, galvanized metals, sodium borohydride, sulfur dioxide.
Incompatibility: Contact with metallic salts may cause precipitation.
Hazardous Decomposition Products: Reaction with acids plus metals may combine with nascent hydrogen to release poisonous arsine gas. Thermal decomposition may produce poisonous gases.
Hazardous Polymerization: Will not occur.

SECTION 11. POTENTIAL HEALTH EFFECTSAcute Effects:

Eyes: Irritant. Causes redness.
Skin: Mild irritant, especially from prolonged exposure. May cause redness.
Ingestion: Slightly toxic. May cause garlic odor of breath and skin, headache, nausea, stomach cramps, convulsions, rapid pulse, coma.
Inhalation: Inhalation of aerosol mist may cause irritation of nasal mucous membranes, garlicky breath, nausea, rapid pulse, coma.

Subchronic Effects: None known.

Chronic Effects: Salty taste, garlicky breath, burning throat, stomach and intestinal pains.

SECTION 12. ECOLOGICAL INFORMATION

Algal/Lemna Growth Inhibition: Acutely toxic.
Toxicity to Fish and Invertebrates: Acute toxicity; slight.
Toxicity to Plants: Acutely toxic.
Toxicity in Birds: Acute toxicity, slight.

SECTION 13. DISPOSAL

Do not contaminate lakes, streams, ponds, estuaries, oceans or other waters by discharge of waste effluents or equipment washwaters. Dispose of waste effluents according to state and local regulations. Also, chemical additions or other alterations of this product may invalidate any disposal information in this MSDS. Therefore, consult local waste regulators for proper disposal. Do not discharge.

SECTION 14. TRANSPORTATIOND.O.T. Shipping Description:

12/1 Qts.; 4/1 Gal.: Environmentally Hazardous Substance, Liquid, N.O.S. (Cacodylic Acid), 9, UN 3082, PG III, RQ 1 Lbs, Ltd. Qty. (No Placards Req.) ERG #171.

2/2.5 Gal.; 5 Gal.; 30 Gal; 55 Gal.: Environmentally Hazardous Substance, Liquid, N.O.S. (Cacodylic Acid), 9, UN 3082, PG III, RQ 1 Lb. (No Placards Req.) ERG #171.

Other Shipping Information:

Compounds, Tree or Weed Killing (Herbicide), Liquid. NMFC Item 50320, LTL Class 60

SECTION 15. REGULATORY INFORMATION

CERCLA: Cacodylic acid is listed as a priority pollutant under the Clean Water Act and, as such, fall under the CERCLA spill reporting requirements of 40 CFR 302. Spills of more than 2.4 gallons of MONTAR exceed the RQ for cacodylic acid and must be reported.

SARA TITLE III, Section 313 Toxic Chemicals: Arsenic compounds (27.4%).

PROPOSITION 65: ATTENTION: This product contains cacodylic acid, a chemical known to the State of California to cause cancer.

SECTION 16. OTHER

All information appearing in this document was based on data provided by third party sources and was compiled to comply with the Federal Hazard Communication Standard and the California Hazardous Substances Information and Training Act. The information is believed to be accurate as of the preparation date, but is not warranted as being the final authority in the use of this product. This information does not purport to be legal or medical advice.