

Material Safety Data Sheet

Effective Date: 12-JAN-2001  
Product: 2,4-D AMINE 4 (SUB)

I. IDENTIFICATION

Chemical Name: DIMETHYLAMINE SALT OF 2,4-D ACETIC ACID  
Chemical Family: CHLORINATED PHENOXY HERBICIDE  
Formula: NOT APPLICABLE, FORMULATED MIXTURE  
Synonyms: NONE  
CAS Number: SEE INGREDIENT STATEMENT, SECTION III.  
EPA Number: 42750-19-5905

II. PHYSICAL DATA

Boiling Point: 212 DEGREES F.  
Freezing Point: >40 DEGREES F.  
Spec Gravity: 1.160 GMS/CC  
Vapor Pressure: 16.5 MM/HG @ 20 DEG C  
Vapor Density: <1 (WATER VAPOR)  
Solubility: SOLUBLE  
Volatiles: NOT DETERMINED  
Evaporation: NOT DETERMINED  
Melting Point: NOT APPLICABLE  
Appearance: AMBER/BROWN LIQUID, WITH PUNGENT ODOR.

III. INGREDIENTS

Material	CAS Number	Percent	TLV	Hazard
DIMETHYLAMINE SALT OF 2,4-DICHLOROPHENOXYACETIC ACID	02008-39-1	46.80	10 MG/M3	SKIN & EYE IRRITANT
INERT INGREDIENTS, INCLUDING WATER AND SEQUESTERING AGENTS		53.20	NOT ESTABLISHED	NOT ESTABLISHED

IV. FIRE AND EXPLOSION HAZARD

Flash Point: AQUEOUS PRODUCT  
Autoignition Temp: NOT APPLICABLE  
Flammable Limit: NOT APPLICABLE  
Extinguishing Media: ALCOHOL FOAM, DRY CHEMICAL AND CARBON DIOXIDE EXTINGUISHING MEDIA.  
Special Fire Fight Proc: WEAR POSITIVE PRESSURE, SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING. DIKE AREA TO PREVENT CHEMICAL RUNOFF. STAY UPWIND AND FIGHT FIRE AT A SAFE DISTANCE.  
Fire and Expl Hazard: PRODUCT MAY PRODUCE TOXIC AND IRRITATING VAPORS AND FUMES UNDER FIRE CONDITIONS.

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V. HEALTH HAZARD

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Carcinogen Information: NOT LISTED BY NTP, IARC OR OSHA

ACUTE EFFECTS OF OVER EXPOSURE

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Swallowing: SLIGHTLY TOXIC. THE ORAL LD50 FOR MALE RATS IS >1,000 MG/KG INGESTION MAY CAUSE GASTROINTESTINAL IRRITATION AND ULCERATION.

Skin Absorption: SLIGHTLY TOXIC; THE DERMAL LD50 IN MALE RABBITS IS 1,122 MG/KG.

Inhalation: A SINGLE EXPOSURE TO VAPORS IS NOT LIKELY TO BE HAZARDOUS. OVEREXPOSURE MAY CAUSE IRRITATION OF THE RESPIRATORY TRACT.

Skin contact: NOT IRRITATING TO SKIN. PROLONGED SKIN EXPOSURE MAY RESULT IN THE MATERIAL BEING ABSORBED THROUGH THE SKIN.

Eye Contact: MAY CAUSE SEVERE IRRITATION WITH CORNEAL INJURY WHICH MAY RESULT IN PERMANENT EYE DAMAGE.

Chronic Effects: SIGNS AND SYMPTOMS OF EXCESSIVE EXPOSURE MAY BE NAUSEA, VOMITING, ABDOMINAL CRAMPS AND DIARRHEA.

Other Hazard: NONE CURRENTLY KNOWN.

EMERGENCY AND FIRST AID PROCEDURES

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Swallowing: GIVE ONE OR TWO GLASSES OF WATER TO DRINK AND INDUCE VOMITING. OBTAIN MEDICAL ATTENTION IMMEDIATELY.

Skin: WASH SKIN THOROUGHLY WITH SOAP AND WATER. IF IRRITATION PERSISTS, CONSULT A PHYSICIAN.

Inhalation: MOVE PERSON TO FRESH AIR. IF BREATHING BECOMES DIFFICULT, OBTAIN MEDICAL ATTENTION IMMEDIATELY.

Eyes: IT IS IMPERATIVE TO FLUSH EYES WITH WATER FOR AT LEAST 30 MINUTES HOLDING EYELIDS OPEN. PROMPT MEDICAL ATTENTION IS ESSENTIAL.

Notes to Physician: SUPPORTIVE CARE; TREATMENT BASED ON JUDGEMENT OF THE PHYSICIAN IN RESPONSE TO REACTIONS OF THE PATIENT. THERE IS NO SPECIFIC ANTIDOTE. IF VICTIM IS FULLY ALERT, INDUCE EMESIS WITH SYRUP OF IPECAC. FOLLOWING EMESIS, ADMINISTER 30 TO 50 GMS. OF ACTIVATED CHARCOAL. IN SEVERE POISONING RESULTING FROM THE INGESTION OF LARGE AMOUNTS OF THIS PRODUCT, FORCED ALKALINE DIURESIS MAY BE REQUIRED.

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VI. REACTIVITY  
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Stability: Stable  
Conditions to Avoid: AVOID ELEVATED TEMPERATURES AND OPEN FLAMES.  
Polymerization: Will Not Occur  
Conditions to Avoid: NONE CURRENTLY KNOWN.  
Incompatibility material: AVOID ACIDS AND OXIDIZING MATERIALS.  
Hazardous Combustion: PRODUCT WILL PRODUCE HYDROGEN CHLORIDE AND  
NITROGEN OXIDES UNDER FIRE CONDITIONS.

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VII. SPILL OR LEAK PROCEDURES  
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Spill or Leak Proc: DIKE AND CONTAIN. ABSORB IN INERT MATERIAL SUCH  
AS CLAY, SAND OR SAWDUST. PLACE MATERIAL IN A  
CHEMICAL WASTE CONTAINER FOR PROPER DISPOSAL.  
WASH AREA WITH WATER, DETERGENT, AND AMMONIA.  
ABSORB AND PLACE IN WASTE CONTAINER.  
Waste Disposal Method: THIS MATERIAL MUST BE DISPOSED OF ACCORDING TO  
FEDERAL, STATE, OR LOCAL PROCEDURES UNDER THE  
RESOURCE CONSERVATION AND RECOVERY ACT.

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VIII. SPECIAL PROTECTION INFORMATION  
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Respiration: WHEN RESPIRATORY PROTECTION IS REQUIRED, USE  
NIOSH/MSHA AIR-PURIFYING RESPIRATOR.  
Ventilation: LOCAL EXHAUST SUFFICIENT.  
Gloves: IMPERVIOUS  
Eyes: CHEMICAL SPLASH GOGGLES.  
Other: EMERGENCY SHOWER, EYE WASH STATION, IMPERVIOUS  
APRON AND FOOTWEAR.

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IX. SPECIAL PRECAUTIONS  
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Special precaution: KEEP OUT OF REACH OF CHILDREN. DO NOT STORE  
WITH FOOD, FEED, OR OTHER MATERIAL TO BE USED  
OR CONSUMED BY HUMANS OR ANIMALS. DO NOT  
CONTAMINATE WATER SUPPLIES, LAKES, STREAMS, OR  
PONDS. DO NOT APPLY WHEN WEATHER CONDITIONS  
FAVOR DRIFT FROM TARGET AREA, AS THIS PRODUCT  
MAY INJURE COTTON, BEANS, VEGETABLES, CERTAIN  
LEGUMES AND ORNAMENTALS. DO NOT STORE NEAR  
SEEDS, FERTILIZERS, INSECTICIDES OR FUNGICIDES.  
Other precaution: A) RCRA HAZARDOUS WASTE NUMBER: D016 ,U240  
B) SARA TITLE III, SECTION 313: NOT LISTED  
C) SARA THRESHOLD PLANNING QUANTITY: NOT LISTED

Helena Chemical Company  
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CHEMTREC: 800-424-9300

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D) CERCLA REPORTABLE QUANTITY: 100 LB.  
E) CALIFORNIA PROPOSITION 65: NOT LISTED  
F) LISTED UNDER MASSACHUSETTS AND NEW JERSEY  
STATE RIGHT-TO-KNOW LAWS.  
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X. SHIPPING INFORMATION  
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Shipping name: CONTAINER >22 GALLONS: RQ, ENVIRONMENTALLY  
HAZARDOUS SUBSTANCES, LIQUID, N.O.S., (2,4-D  
DMA ACID), 9, UN3082, PG III "ERG #171"  
Hazard Class: CLASS 9  
Identification No: UN3082  
Labels Required: CLASS 9  
Placarding: UN3082  
Freight Class: COMPOUNDS, WEED KILLING, LIQUIDS, NOIBN(NMFC  
ITEM 50320, CLASS 60)

Chemical Name	Equivalent R.Q.
----- 2,4-DICHLOROPHENOXYACETIC ACID	----- 100 LB(45.4 KG)

TRANSPORTATION NOTE: Not regulated by DOT in containers less than 22 gallons.

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XI. GENERAL PRODUCT INFORMATION  
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National Fire Protection Association Rating:  
(Rating level: 4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum)

Health: 3                      Fire: 1                      Reactivity: 1

S.A.R.A. Title III Hazard Classification: (Yes/No)

Immediate (Acute) Health: Y                      Delayed (Chronic) Health: Y  
Sudden Release of pressure: N                      Fire: N  
Reactive: N

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Mail inquiries to: 225 Schilling Blvd., Suite 300 Collierville, TN 38017  
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