

Material Safety Data Sheet

Effective Date: 13-NOV-2002
Product: DSMA 4 LB (42519-15-5905)

I. IDENTIFICATION

Chemical Name: DISODIUM ACID METHANEARSONATE (DSMA).
Chemical Family: ORGANO-ARSENIC COMPOUNDS.
Formula: NOT APPLICABLE, FORMULATED MIXTURE.
Synonyms: NONE
CAS Number: 0144-21-8
EPA Number: 42519-15-5905

II. PHYSICAL DATA

Boiling Point: >100 DEGREES C.
Freezing Point: <32 DEGREES F.
Spec Gravity: 1.256 GMS/CC
Vapor Pressure: <10 MM/HG @ 26 DEG. C
Vapor Density: NOT DETERMINED
Solubility: MISCIBLE
Volatiles: 70
Evaporation: NOT DETERMINED
Melting Point: NOT APPLICABLE
Appearance: LIGHT YELLOW, CLEAR LIQUID, GARLIC ODOR

III. INGREDIENTS

Material	CAS Number	Percent	TLV	Hazard
DISODIUM ACID METHANEARSONATE (DSMA) (TOTAL ARSENIC, AS ELEMENTAL, ALL IN WATER SOLUBLE FORM: 9.84%)		23.70	0.5 MG/M3 (TWA)	MODERATELY TOXIC
WATER AND ANIONIC SURFACTANT BLEND		76.30	NOT ESTABLISHED	NOT ESTABLISHED

IV. FIRE AND EXPLOSION HAZARD

Flash Point: NOT COMBUSTIBLE
Autoignition Temp: NOT COMBUSTIBLE
Flammable Limit: NOT APPLICABLE
Extinguishing Media: NONCOMBUSTIBLE LIQUID. USE EXTINGUISHING MEDIA FOR UNDERLYING CAUSE OF FIRE.
Special Fire Fight Proc: PRESSURE-DEMAND, SELF-CONTAINED BREATHING APPARATUS SHOULD BE WORN BY FIREFIGHTERS IN BUILDINGS OR CONFINED SPACES.
Fire and Expl Hazard: MAY GENERATE TOXIC FUMES UNDER FIRE

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CONDITIONS.

V. HEALTH HAZARD

Carcinogen Information: NOT LISTED BY IARC, NTP, OR OSHA.

ACUTE EFFECTS OF OVER EXPOSURE

Swallowing: SLIGHTLY TOXIC - ACUTE ORAL LD50 (RATS) =3.6 G/KG. IF INGESTED, BREATH MAY HAVE GARLIC LIKE ODOR.

Skin Absorption: SLIGHTLY TOXIC - ACUTE DERMAL LD50 (RABBITS) = 10 G/KG. APPARENTLY NOT READILY ABSORBED THROUGH INTACT SKIN.

Inhalation: MILDLY IRRITATING TO RESPIRATORY TRACT. THE ACUTE INHALATION LC50 (RATS) = > 22 MG/L.

Skin contact: MILDLY IRRITATING WITH REPEATED OR PROLONGED CONTACT. NOT READILY ABSORBED THROUGH UNBROKEN SKIN.

Eye Contact: MAY CAUSE SLIGHT IRRITATION, AND CONJUNCTIVITIS (INFLAMMATION OF THE INNER SURFACE OF THE EYE LIDS)

Chronic Effects: DEGREE OF IRRITATION MAY INCREASE. POISONING EFFECTS ARE SALTY TASTE IN MOUTH, BURNING THROAT AND STOMACH AND INTESTINAL PAINS.

Other Hazard: MILDLY IRRITATING TO TISSUE CONTACTED FOLLOWING PROLONGED ACUTE EXPOSURE. SYMPTOMS OF POISONING ARE HEADACHE, DIZZINESS, STUPOR, VOMITING, DIARRHEA, CONVULSIONS, PARALYSIS OR DEATH.

EMERGENCY AND FIRST AID PROCEDURES

Swallowing: INDUCE VOMITING IF CONSCIOUS. GIVE PLENTY OF WATER. TREATMENT BY PHYSICIAN SHOULD BE DIRECTED TOWARD THE ELIMINATION OF ARSENIC. ADMINISTER BAL AND TREAT FOR SHOCK.

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

Inhalation: IF SIGNS AND SYMPTOMS ARE NOTED. MOVE TO FRESH AIR. IF IRRITATION DEVELOPS, CONSULT A PHYSICIAN.

Eyes: FLUSH EYES WITH WATER FOR 15 MINUTES, HOLDING EYELIDS OPEN. IF IRRITATION DEVELOPS, CONSULT A PHYSICIAN.

Notes to Physician: THIS PRODUCTS CONTAINS DISODIUM ACID METHANEARSONATE (DSMA). THIS COMPOUND BINDS TO SULFHYDRYL GROUPS IN TISSUES. BAL HAS BEEN

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RECOMMENDED IN THE LITERATURE AS AN ANTIDOTE FOR POISONING. HOWEVER, THIS USE IS HIGHLY CONTROVERSIAL. IF INGESTED, GASTRIC LAVAGE MAY BE REQUIRED. THE TOXICITY OF THE ORGANIC ARSENICAL USED IN THIS PRODUCT IS LOWER THAN THAT OF INORGANIC ARSENIC COMPOUNDS.

VI. REACTIVITY

Stability: Stable
Conditions to Avoid: NONE CURRENTLY KNOWN
Polymerization: Will Not Occur
Conditions to Avoid: NONE CURRENTLY KNOWN
Incompatibility material: AVOID CONTACT WITH ACIDS AND METALS SUCH AS ZINC, ALUMINUM, COPPER AND TIN.
Hazardous Combustion: BURNING MAY RESULT IN THE FORMATION OF ARSENIC COMPOUNDS.

VII. SPILL OR LEAK PROCEDURES

Spill or Leak Proc: DIKE AND ABSORB SPILL WITH AN ABSORBENT, SUCH AS CLAY, SAND, OR SAWDUST. TRANSFER TO SUITABLE CONTAINERS FOR PROPER DISPOSAL. FLUSH SPILL AREA WITH WATER, ABSORB AND PLACE IN SAME CONTAINERS WITH OTHER MATERIAL.
Waste Disposal Method: THIS MATERIAL MUST BE DISPOSED OF ACCORDING TO FEDERAL, STATE, OR LOCAL PROCEDURES UNDER THE RESOURCE CONSERVATION AND RECOVERY ACT.

VIII. SPECIAL PROTECTION INFORMATION

Respiration: UNDER MISTY CONDITIONS, USE NIOSH/MSHA APPROVED RESPIRATORY PROTECTION (MSHA/NIOSH APPROVAL NUMBER PREFIX TC-23C).
Ventilation: LOCAL EXHAUST NORMALLY SUFFICIENT.
Gloves: IMPERVIOUS
Eyes: SPLASH PROOF GOGGLES.
Other: EYE WASH STATION, IMPERVIOUS APRON AND FOOTWEAR.

IX. SPECIAL PRECAUTIONS

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

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CONTAMINATE WATER SUPPLIES, LAKES, STREAMS, OR
PONDS. DO NOT FEED TREATED FOLIAGE TO
LIVESTOCK OR GRAZE TREATED AREAS. DO NOT SPRAY
OR ALLOW DRIFT ONTO VEGETABLES, ORNAMENTALS OR
OTHER DESIREABLE PLANTS.

Other precaution: A) RCRA HAZARDOUS WASTE NUMBER: D004, ARSENIC
B) SARA TITLE III, SECTION 313 9.84% ARSENIC
(AS ELEMENTAL)
C) SARA THRESHOLD PLANNING QUANTITY: NOT
LISTED
D) CERCLA REPORTABLE QUANTITY: 100 LBS (AS
WASTE)
A) 49 CFR 172.101, APPENDIX A: NOT LISTED
B) 49 CFR 172.101, APPENDIX B: NOT LISTED

X. SHIPPING INFORMATION

Shipping name: NOT REGULATED BY DOT (HIGHWAY), IATA (AIR), OR
IMDG (WATER).

Hazard Class: NONE
Identification No: NONE
Labels Required: NONE REQUIRED
Placarding: NOT REQUIRED
Freight Class: COMPOUND, WEED KILLING, LIQUID, NOIBN (NMFC
ITEM 50320, CLASS 60).

Chemical Name	Equivalent R.Q.
----- NOT APPLICABLE	----- NOT APPLICABLE

XI. GENERAL PRODUCT INFORMATION

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

Health: 2 Fire: 0 Reactivity: 0

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

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

Helena Chemical Company
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