
MANUFACTURER / EMERGENCY INFORMATION

HELENA CHEMICAL COMPANY
6075 POPLAR, SUITE 500
MEMPHIS, TN 38119

EMERGENCY TELEPHONE NUMBER:
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2. CHEMTREC (800) 424-9300

EFFECTIVE DATE: 01/23/96

I. IDENTIFICATION

CHEMICAL NAME MALATHION
CHEMICAL FAMILY ORGANOPHOSPHATE PESTICIDES
FORMULA C10H19O6PS2, MALATHION
SYNONYMS MALATHION ULV
CAS NUMBER SEE INGREDIENT STATEMENT, SECTION III.
EPA REGISTRY NO. 5905-112

II. PHYSICAL DATA

BOILING POINT 156 DEGREES C.
FREEZING POINT <0 DEGREES C.
SPECIFIC GRAVITY 1.230 GMS/CC
VAPOR PRESSURE 10 MM HG
VAPOR DENSITY NOT APPLICABLE
SOLUBILITY IN WATER .01%
PER CENT VOLATILES <2%
EVAPORATION RATE NEGLIGIBLE
MELTING POINT NOT APPLICABLE
APPEARANCE & ODOR CLEAR/YELLOW LIQUID, CHARACTERISTIC ODOR

III. INGREDIENTS

.....MATERIAL.....%TLV(UNITS)..HAZARD.....
- CAS NUMBER			
MALATHION -----	00121-75-5	95.00 10 MG/M3	MODERATELY TOXIC
XYLENE RANGE			
HYDROCARBONS -----	01330-20-7	5.00 100 PPM (SKIN)	SKIN & EYE IRRITANT

IV. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT : >325 DEGREES F.
AUTOIGNITION TEMPERATURE: NOT DETERMINED
FLAMMABLE LIMITS : NOT APPLICABLE
EXTINGUISHING MEDIA:
- DRY CHEMICAL OR CARBON DIOXIDE FOR SMALL FIRES,
- WATER SPRAY OR FOAM FOR LARGE FIRES.

SPECIAL FIRE FIGHTING PROCEDURES:

- WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL FIRE FIGHTING CLOTHING. USE AS LITTLE WATER AS POSSIBLE. DIKE AREA TO PREVENT PESTICIDE RUNOFF. USE SPRAY OR FOG. CONDUCT FIRE FIGHTING UPWIND.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

- ALERT MEDICAL PERSONNEL TO BE READY TO TREAT FOR PESTICIDE POISONING. SHOULD TREATMENT BE NECESSARY.
-

V. HEALTH HAZARD

-CARCINOGENICITY INFORMATION: NONE CURRENTLY LISTED.

-ACUTE EFFECTS OF OVEREXPOSURE

SWALLOWING:

- SLIGHTLY TOXIC; THE ACUTE ORAL LD50 IN THE RAT (MALE) IS 2,800 MG/KG.
-

SKIN ABSORPTION:

- MODERATELY TOXIC; THE ACUTE DERMAL LD50 IN THE RABBIT (MALE) IS 4,100 MG/KG.

INHALATION:

- VAPOR OR AEROSOL INHALATION MAY PRODUCE CHOLINESTERASE DEPRESSION AND/OR RESPIRATORY IRRITATION.

SKIN CONTACT:

- SLIGHTLY IRRITATING.
-

EYE CONTACT:

- SLIGHTLY IRRITATING.
-

CHRONIC EFFECTS:

- CHOLINESTERASE INHIBITION, OVER-EXPOSURE MAY CAUSE ACUTE EFFECTS.
-

OTHER HEALTH HAZARD:

- NONE CURRENTLY KNOWN.
-
-

-EMERGENCY AND FIRST AID PROCEDURES

SWALLOWING:

- DO NOT INDUCE VOMITING, OBTAIN MEDICAL ATTENTION IMMEDIATELY.
- GIVE OXYGEN IF PERSON HAS DIFFICULTY BREATHING. GIVE ARTIFICIAL RESPIRATION IF PERSON IS NOT BREATHING.

SKIN:

- REMOVE CONTAMINATED CLOTHING AT ONCE, WASH SKIN THOROUGHLY WITH SOAP AND WATER. OBTAIN MEDICAL ATTENTION IMMEDIATELY.

INHALATION:

- REMOVE PERSON FROM EXPOSURE. GIVE OXYGEN IF THERE IS DIFFICULTY IN BREATHING. OBTAIN MEDICAL ATTENTION IMMEDIATELY.

EYES:

- FLUSH EYES WITH WATER FOR 15 MINUTES, HOLDING EYELIDS OPEN.
- IF IRRITATION DEVELOPS, OBTAIN MEDICAL ATTENTION IMMEDIATELY.

- NOTES TO PHYSICIAN

- PARASYMPATHOMIMETIC AGENT. ERYTHROCYTE CHOLINESTERASE ACTIVITY SHOULD

- BE MEASURED. SIGNS AND SYMPTOMS INCLUDE PROGRESSIVELY: HEADACHE,
- LIGHTHEADEDNESS, MIOSES WITH LOSS OF ACCOMMODATION, NAUSEA, VOMITING,
- HYPERHIDROSIS, MUSCLE FASCICULATIONS, SPHINCTER FAILURE, COMA, AND
- DEATH. IF SIGNS AND SYMPTOMS ARE PRESENT, GIVE ATROPINE, 4 MG, I.V..
- REPEAT EVERY 10 MINUTES UNTIL ATROPINIZED. OBSERVE FOR AT LEAST 48
- HOURS. OPIATES AND PHENOTIAZINE TRANQUILIZERS ARE CONTRAINDICATE. IF
- RECENTLY INGESTED, EVACUATE STOMACH BY INTUBATION.

VI. REACTIVITY DATA

STABILITY : STABLE
CONDITIONS TO AVOID: CONTACT WITH IRON AND STRONG ALKALIES
AND STORAGE ABOVE 120 DEGREES F.
POLYMERIZATION : WILL NOT OCCUR
CONDITIONS TO AVOID: NONE CURRENTLY KNOWN

INCOMPATIBILITY: IRON, STRONG ALKALIES, AND STRONG OXIDIZERS.
MATERIALS

HAZARDOUS : THERMAL DECOMPOSITION MAY PRODUCE ISOMALATHION,
COMBUSTION : HYDROGEN SULFIDE, SULFUR, OXIDES OF CARBON AND
PHOSPHORUS.

VII. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED
-ABSORB IN CLAY OR SODA ASH; SWEEP UP AND PLACE IN WASTE DISPOSAL
-CONTAINER. TREAT CONTAMINATED AREA WITH FULL-STRENGTH LIQUID CHLORINE
-BLEACH. LET STAND FOR 15 MINUTES, AND REPEAT PROCEDURE. FLUSH AREA WITH
-WATER.
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 : USE ONLY NIOSH/MSHA CARTRIDGE TYPE RESPIRATOR APPROVED
FOR ORGANOPHOSPHATE PESTICIDE VAPORS.
VENTILATION : LOCAL EXHAUST SUFFICIENT.
GLOVES : IMPERVIOUS
EYES : CHEMICAL SPLASH GOGGLES.
OTHERS : EMERGENCY SHOWER, EYE WASH STATION, IMPERVIOUS APRON
AND FOOTWEAR.

IX. SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
- 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.
-
- STORE IN A SECURE, DRY, WELL-VENTILATED AREA, SEGREGATED FROM
- OXIDIZERS AND INCOMPATIBLE MATERIALS. PROTECT FROM MOISTURE.
OTHER PRECAUTIONS
- A) RCRA HAZARDOUS WASTE NUMBER:----- U239, XYLENE
- B) SARA TITLE III, SECTION 313:----- MALATHION (95%), XYLENE (05%)

- C) SARA THRESHOLD PLANNING QUANTITY: NOT LISTED
- D) CERCLA REPORTABLE QUANTITY:----- 10 GALLON
- E) 49 CFR 172.101, APPANDIC A:----- HAZARDOUS SUBSTANCE
- F) 49 CFR 172.101, APPENDIX B:----- MARINE POLLUTANT

X. SHIPPING INFORMATION

D.O.T. DATA - PROPER SHIPPING NAME:

- "RQ" ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S.,
- (95% MALATHION), 9, UN 3082, PG III "ERG GUIDE #31"

HAZARD CLASS : CLASS 9
IDENTIFICATION NO.: UN3082
LABELS REQUIRED : CLASS 9
PLACARDING : NOT REQUIRED

FREIGHT CLASSIFICATION:

- INSECTICIDES, N.O.I., OTHER THAN POISON
- (NMFC ITEM 102120, CLASS 60)

..CHEMICAL NAME	EQUIVALENT R.Q.
MALATHION	100 LB/(45.4 KG)
XYLENE	1000 LB/(454 KG)

XI. GENERAL PRODUCT INFORMATION

NATIONAL FIRE PROTECTION ASSOCIATION RATING:

(RATING LEVEL: 4-EXTREME 3-HIGH 2-MODERATE 1-SLIGHT 0-MINIMUM)

HEALTH: 2 FIRE: 1 REACTIVITY: 1

S.A.R.A. TITLE III HAZARD CLASSIFICATION: (YES / NO)

IMMEDIATE (ACUTE) HEALTH :	Y	DELAYED (CHRONIC) HEALTH :	N
SUDDEN RELEASE OF PRESSURE:	N		
FIRE :	Y	REACTIVE :	N

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