

Helena Chemical Company
PH: 901-761-0050
CHEMTRAC: 800-424-9300

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Material Safety Data Sheet

Effective Date: 16-JAN-2000
Product: BARRAGE HF

I. IDENTIFICATION

Chemical Name: 2-ETHYLHEXYL ESTER OF 2,4-D ACETIC ACID
Chemical Family: CHLORINATED PHENOXY HERBICIDE
Formula: NOT APPLICABLE, FORMULATED MIXTURE
Synonyms: NONE
CAS Number: 25168-26-7
EPA Number: 5905-529

II. PHYSICAL DATA

Boiling Point: >300 DEGREES F.
Freezing Point: <32 DEGREES F.
Spec Gravity: 1.090 GMS/CC
Vapor Pressure: NOT DETERMINED
Vapor Density: NOT DETERMINED
Solubility: EMULSIFIABLE
Volatiles: <0.1%
Evaporation: NOT DETERMINED
Melting Point: NOT APPLICABLE
Appearance: LT. BROWN LIQUID, PETRO. DISTILLATE ODOR

III. INGREDIENTS

Material	CAS Number	Percent	TLV	Hazard
2-ETHYLHEXYL ESTER OF 2,4-D DICHLOOROPHENOXYACETIC ACID (EQUIVALENT TO 51.8% 2,4-D ACID, OR 4.7 LBS/GAL)		78.10	10 MG/M3	SKIN & EYE IRRITANT
INERT INGREDIENTS (INCLUDING PETROLEUM DISTILLATES)		21.90	100 PPM (AIR)	SKIN & EYE IRRITANT

IV. FIRE AND EXPLOSION HAZARD

Flash Point: >200 DEGREES F. (TCC)
Autoignition Temp: 850 DEGREES F.
Flammable Limit: NOT DETERMINED
Extinguishing Media: USE DRY CHEMICALS OR CARBON DIOXIDE. USE OF
WATER OR FOAM SHOULD BE DISCOURAGED TO PREVENT
SPREADING OF MATERIAL.
Special Fire Fight Proc: USE WATER TO KEEP FIRE EXPOSED CONTAINERS COOL.
SELF-CONTAINED BREATHING APPARATUS SHOULD BE
PROVIDED FOR FIREFIGHTERS IN BUILDINGS OR
CONFINED AREAS.

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Fire and Expl Hazard: MAY LIBERATE HYDROGEN CHLORIDE (AN ACIDIC GAS) WHEN BURNED.

V. HEALTH HAZARD

Carcinogen Information: DID NOT CAUSE CANCER IN ANIMAL STUDIES.

ACUTE EFFECTS OF OVER EXPOSURE

Swallowing: SINGLE DOSE ORAL TOXICITY IS LOW. ORAL LD₅₀ (MALE RAT) 1492 MG/KG. MAY CAUSE GASTROINTESTINAL IRRITATION OR ULCERATION.

Skin Absorption: LD₅₀ (RABBIT) 2871 MG/KG. SINGLE PROLONGED SKIN EXPOSURE MAY RESULT IN MATERIAL BEING ABSORBED IN HARMFUL AMOUNTS.

Inhalation: SINGLE EXPOSURE TO VAPORS IS NOT LIKELY TO BE HAZARDOUS.

Skin contact: PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE SKIN IRRITATION.

Eye Contact: MAY CAUSE SEVERE IRRITATION WITH CORNEA INJURY, WHICH MAY RESULT IN PERMANENT VISION IMPAIRMENT.

Chronic Effects: EXCESSIVE EXPOSURE MAY CAUSE LIVER, KIDNEY, GASTROINTESTINAL AND MUSCULAR EFFECTS. SIGNS AND SYMPTOMS OF EXCESSIVE EXPOSURE MAY BE NAUSEA, VOMITING, ABDOMINAL CRAMPS AND DIARRHEA.

Other Hazard: HIGH DIETARY LEVELS CAUSED TOXIC EFFECTS (WEIGHT AND VIABILITY REDUCTION) IN RATS ON A REPRODUCTION TEST. RESULT OF MUTAGENICITY TESTS IN ANIMALS HAVE BEEN INCONCLUSIVE.

EMERGENCY AND FIRST AID PROCEDURES

Swallowing: DILUTE BY GIVING 1 OR 2 GLASSES OF WATER TO DRINK. DO NOT INDUCE VOMITING. CALL A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY.

Skin: WASH CONTAMINATED SKIN WITH SOAP AND WATER. OBTAIN MEDICAL ATTENTION IF IRRITATION DEVELOPS. LAUNDER CLOTHING BEFORE RE-USE.

Inhalation: MOVE VICTIM TO FRESH AIR. IF STOPPED BREATHING, GIVE ARTIFICIAL RESPIRATION. OBTAIN MEDICAL ATTENTION IMMEDIATELY.

Eyes: FLUSH EYES WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES, HOLDING EYES OPEN. OBTAIN MEDICAL ATTENTION IMMEDIATELY.

Notes to Physician: NO SPECIFIC ANTIDOTE. GIVE SUPPORTIVE CARE. TREATMENT BASED ON JUDGEMENT OF THE PHYSICIAN

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IN RESPONSE TO REACTIONS OF THE PATIENT.

VI. REACTIVITY

Stability: Stable
Conditions to Avoid: DO NOT EXPOSE TO HEAT OR FLAME.
Polymerization: Will Not Occur
Conditions to Avoid: NONE CURRENTLY KNOWN.
Incompatibility material: NONE CURRENTLY KNOWN.
Hazardous Combustion: MAY PRODUCE HYDROGEN CHLORIDE (AN ACIDIC GAS)
UNDER FIRE CONDITIONS.

VII. SPILL OR LEAK PROCEDURES

Spill or Leak Proc: CONTAIN SPILLS. REMOVE AS MUCH MATERIAL AS
POSSIBLE INCLUDING CONTAMINATED SOIL. "DO NOT
USE VACUUM TRUCK". USE ABSORBENT MATERIAL.
TRANSFER TO RECOVERY DRUMS FOR PROPER DISPOSAL.
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 APPROVED NIOSH/MSHA AIR PURIFYING
RESPIRATOR IF ATMOSPHERE CONTAINS LEVELS ABOVE
TLV.
Ventilation: GOOD GENERAL VENTILATION IS SUFFICIENT.
Gloves: IMPERVIOUS
Eyes: CHEMICAL WORKERS 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
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.
Other precaution: A) RCRA HAZARDOUS WASTE NUMBER:----- U240 -
2,4-D SALTS AND ESTERS

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B) SARA TITLE III, SECTION 313:----- 2,4-D
(78.1%) 01/01/87
C) SARA THRESHOLD PLANNING QUANTITY: 10,000
LBS/MIXTURE
D) CERCLA REPORTABLE QUANTITY:----- 21 GALLON
E) 49 CFR 172.101, APPENDIX A:----- HAZARDOUS
SUBSTANCE
F) 49 CFR 172.101, APPENDIX B:----- MARINE
POLLUTANT.

X. SHIPPING INFORMATION

Shipping name: RQ ENVIRONMENTALLY HAZARDOUS SUBSTANCES,
LIQUID, N.O.S., (2,4-D ACID ESTER), 9, UN3082,
PG III "ERG GUIDE #171"

Hazard Class: CLASS 9
Identification No: UN3082
Labels Required: CLASS 9
Placarding: NO PLACARD REQUIRED
Freight Class: COMPOUND, WEED KILLING, LIQUID, NOIBN(NMFC ITEM
50320, CLASS 60)
Chemical Name Equivalent R.Q.

2,4-DICHLOROPHOXYACETIC ACID ESTER 100 LBS(45.4 KG)
*TRANSPORTATION NOTE; NOT REGULATED BY
DOT
IN SINGLE CONTAINERS LESS THAN 21
GALLONS.

XI. GENERAL PRODUCT INFORMATION

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

Health: 2 Fire: 2 Reactivity: 0

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

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

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