

AQUATHOL® Granular

AQUATIC HERBICIDE

elf atochem



MATERIAL SAFETY DATA SHEET

EMERGENCY TELEPHONE NUMBERS:
(215) 419-5054 (7:30 a.m.-4 p.m. EST) (PRIMARY)
(800) 424-9300 (CHEMTREC)
(303) 623-5716 (Rocky Mountain Poison Control)

ADDRESS:
ELF ATOCHEM NORTH AMERICA, INC.
AGRICHEMICALS GROUP
2000 MARKET ST., 21st FLOOR
PHILADELPHIA, PA 19103-3222

FORM 4627
REV. 12/97

PRODUCT IDENTIFICATION

PRODUCT NAME

AQUATHOL® GRANULAR
AQUATIC HERBICIDE

EPA REG. NO.

4581-201

ELF ATOCHEM NORTH AMERICA, INC. CODE NUMBER

103

CHEMICAL NAME AND MOLECULAR FORMULA

DIPOTASSIUM ENDOTHALL
C₁₂H₈O₄K₂

SYNONYMS

DIPOTASSIUM 7-OXABICYCLO[2.2.1]HEPTANE-2,3-DICARBOXYLATE

CAS NUMBER

2164-07-0

CHEMICAL FAMILY

DICARBOXYLIC ACID — DISALT

HAZARDOUS INGREDIENTS

MATERIALS OR COMPONENTS

	% WW
DIPOTASSIUM ENDOTHALL	10.1

Contains no substances known to be carcinogens.

SARA TITLE III

Hazards Classification (40 CFR 370):

Immediate Health: YES
Delayed Health: NO
Fire: NO
Sudden Pressure: NO
Reactivity: NO

Section 313 (40 CFR 372): This product contains the following chemicals subject to SARA Section 313 reporting requirements: Dipotassium endothall.

SHIPPING INFORMATION

PROPER SHIPPING DESCRIPTION

PESTICIDES, SOLID, TOXIC, NOS (ENDOTHALL), 6.1, UN2588, PG III

PLACARD

KEEP AWAY FROM FOOD

DOT RQ

1000 LBS.

PHYSICAL PROPERTIES

PHYSICAL STATE

BOILING POINT/RANGE

NA

MELTING POINT

> 360°C

FREEZING POINT

NA

MOLECULAR WEIGHT (CALCULATED)

230.35

BULK DENSITY

36-40 LB/FT³
0.739 gm/cm³

VAPOR PRESSURE (mm Hg)

1.285 (25°C/25°C)

VAPOR DENSITY (AIR = 1)

NA

SOLUBILITY IN H₂O

pH	g/100 ml
5	≥ 65
7	≥ 65
9	≥ 65

% VOLATILES BY VOLUME

NA

EVAPORATION RATE

NA

APPEARANCE AND ODOR

LIGHT BROWN SOLID
SHARP MUSK ODOR

FIRE AND EXPLOSION DATA

FLASH POINT

NONE

FLAMMABLE LIMITS

NA

AUTOIGNITION TEMPERATURE/FIRE POINT

NA

EXTINGUISHING MEDIA

<input checked="" type="checkbox"/> WATER SPRAY	<input checked="" type="checkbox"/> DRY CHEMICAL
<input checked="" type="checkbox"/> WATER FOG	<input type="checkbox"/> ALCOHOL FOAM
<input type="checkbox"/> WATER STREAM	<input checked="" type="checkbox"/> FOAM
<input checked="" type="checkbox"/> CO ₂	<input checked="" type="checkbox"/> EARTH OR SAND

SPECIAL FIRE FIGHTING PROCEDURES

DO NOT ENTER BUILDING
 ALLOW FIRE TO BURN
 WATER MAY CAUSE FROTHING
 DO NOT USE WATER
 OTHER:
PRODUCT IS NON-FLAMMABLE

UNUSUAL FIRE AND EXPLOSION HAZARDS

DUST EXPLOSION HAZARD
 SENSITIVE TO SHOCK
 CONTAMINATION
 TEMPERATURE
 OTHER:
NONE

REACTIVITY DATA

STABILITY

STABLE UNSTABLE

CONDITIONS CONTRIBUTING TO INSTABILITY

THERMAL DECOMPOSITION
 PHOTO DEGRADATION
 POLYMERIZATION
 CONTAMINATION

REACTIVITY DATA, CONTINUED

INCOMPATIBILITY — AVOID CONTACT WITH

STRONG ACIDS
 STRONG ALKALIS
 STRONG OXIDIZERS
 OTHER:
MATERIALS THAT REACT WITH WATER

HAZARDOUS DECOMPOSITION PRODUCTS, THERMAL AND OTHER:

NONE

CONDITIONS TO AVOID

HEAT
 OPEN FLAMES
 SPARKS
 IGNITION SOURCES

SPILL OR LEAK

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

2 FLUSH WITH WATER
1 ABSORB WITH SAND OR INERT MATERIAL
 NEUTRALIZE
1 SWEEP OR SCOOP UP AND REMOVE
 KEEP UPWIND. EVACUATE ENCLOSED SPACES
 PREVENT SPREAD OR SPILL
 DISPOSE OF IMMEDIATELY

WASTE DISPOSAL METHOD:

If wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

NA = NOT APPLICABLE
NE = NOT ESTABLISHED
◆ = SECTION REVISED

CONTINUED ON OTHER SIDE

MATERIAL
SAFETY
DATA SHEET

ELF ATOCHEM NORTH AMERICA, INC.
PRODUCT NAME:
AQUATHOL® GRANULAR AQUATIC HERBICIDE
CODE NUMBER:
103

BEFORE USING PRODUCT, READ AND FOLLOW DIRECTIONS AND PRECAUTIONS ON PRODUCT LABEL AND BULLETINS.

TOXICITY

ORAL (ACUTE)

LD₅₀ (RAT) — 1,340 mg/kg

DERMAL (ACUTE)

LD₅₀ (RABBIT) > 10,000 mg/kg

INHALATION (ACUTE)

LC₅₀ (1 HOUR RAT) — 2.26 mg/L

CHRONIC. SUBCHRONIC. ETC.

Based on a 1-year feeding study of disodium endothal to dogs, the NOEL is considered to be 150 ppm. Mice were dosed with disodium endothal in an 18-month oncogenicity study. The NOEL for this study is considered to be 100 ppm. There was no indication of carcinogenic effects. (1987, 1988)

HEALTH HAZARD INFORMATION

EFFECTS OF EXPOSURE TO CONCENTRATE

PERMISSIBLE EXPOSURE LIMIT (TLV/TWA OR CEILING [C])

ACGIH	TLV NE
OSHA	TWA NE

IRRITATION

<input checked="" type="checkbox"/> SKIN	<input checked="" type="checkbox"/> EYE
<input type="checkbox"/> SEVERE	<input checked="" type="checkbox"/> SEVERE
<input checked="" type="checkbox"/> MODERATE	<input type="checkbox"/> MODERATE
	<input type="checkbox"/> MILD (TRANSIENT)

CORROSIVITY

<input type="checkbox"/> SKIN	<input checked="" type="checkbox"/> EYE
<input type="checkbox"/> 4 HRS. (DOT)	<input type="checkbox"/> MAY CAUSE BLINDNESS
<input type="checkbox"/> 24 HRS. (CPSC)	

SENSITIZATION

NOT A SENSITIZER

INHALATION EFFECTS

NA

LUNG EFFECTS

IRRITATION AND CONGESTION UPON HEAVY OVEREXPOSURE

HEALTH HAZARD INFORMATION, CONTINUED

EMERGENCY FIRST AID

INGESTION

- GET MEDICAL ATTENTION
 - INDUCE VOMITING
 - DO NOT INDUCE VOMITING
 - GIVE PLENTY OF WATER
 - OTHER:
DRINK PROMPTLY A LARGE QUANTITY OF MILK, EGG WHITES, GELATIN SOLUTION OR, IF THESE ARE NOT AVAILABLE, DRINK LARGE QUANTITIES OF WATER. AVOID ALCOHOL
- NOTE TO PHYSICIAN:** PROBABLE MUCOSAL DAMAGE MAY CONTRAINDICATE THE USE OF GASTRIC LAVAGE. MEASURES AGAINST CIRCULATORY SHOCK, RESPIRATORY DEPRESSION, AND CONVULSION MAY BE NEEDED.

DERMAL

- GET MEDICAL ATTENTION
- FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES
- CONTAMINATED CLOTHING — REMOVE AND LAUNDRY
- CONTAMINATED SHOES — DESTROY

EYE CONTACT

- GET MEDICAL ATTENTION
- FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES

INHALATION

- GET MEDICAL ATTENTION
- REMOVE TO FRESH AIR
- IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION
- GIVE OXYGEN

SPECIAL PROTECTION INFORMATION

VENTILATION REQUIREMENTS —

ALWAYS MAINTAIN EXPOSURE BELOW PERMISSIBLE EXPOSURE LIMITS

- CONSULT AN INDUSTRIAL HYGIENIST OR ENVIRONMENTAL HEALTH SPECIALIST
- LOCAL EXHAUST
- USE WITH ADEQUATE VENTILATION
- CHECK FOR AIR CONTAMINANT AND OXYGEN DEFICIENCY

EYE

- SAFETY GLASSES
- FACE SHIELD
- GOGGLES

HAND (GLOVE TYPE)

- POLYVINYL CHLORIDE
- NEOPRENE
- BUTYL RUBBER
- NATURAL RUBBER
- POLYVINYL ALCOHOL
- POLYETHYLENE
- ANY

RESPIRATOR TYPE

NOT REQUIRED — USE NORMAL SAFETY PRECAUTIONS

OTHER PROTECTIVE EQUIPMENT

WEAR PROTECTIVE CLOTHING TO PREVENT EYE AND SKIN CONTACT.

SPECIAL PRECAUTIONS

PRECAUTIONARY LABELING

- WASH THOROUGHLY AFTER HANDLING
- DO NOT GET IN EYES, ON SKIN OR CLOTHING
- DO NOT BREATHE DUST, VAPOR MIST, GAS
- KEEP CONTAINER CLOSED
- KEEP AWAY FROM HEAT SPARKS AND OPEN FLAMES
- STORE IN TIGHTLY CLOSED CONTAINERS
- DO NOT STORE NEAR COMBUSTIBLES
- KEEP FROM CONTACT WITH CLOTHING AND OTHER COMBUSTIBLE MATERIALS
- EMPTY CONTAINER MAY CONTAIN HAZARDOUS RESIDUES
- USE EXPLOSION-PROOF EQUIPMENT

OTHER HANDLING AND STORAGE CONDITIONS

Store in the original container preferably in a locked storage area. Do not store in a manner where cross-contamination with other pesticides, fertilizers, food or feed could occur.

PLEASE NOTE

Elf Atochem North America, Inc. believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY, OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be valid where such product is used in combination with any other materials or in any process. Further, since the conditions and methods of use of the product and of the information referred to herein are beyond the control of Elf Atochem, Elf Atochem expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.

DATE: 12/97

ADDRESS:
ELF ATOCHEM NORTH AMERICA, INC.
AGGRICHEMICALS GROUP
2000 MARKET ST., 21st FLOOR
PHILADELPHIA, PA 19103-3222