

Material Safety Data Sheet

Effective Date: 12-JUN-2001  
Product: TRIFLURALIN 4 EC

I. IDENTIFICATION

Chemical Name: TRIFLURALIN  
Chemical Family: DINITROANILINE  
Formula: NOT APPLICABLE, FORMULATED MIXTURE.  
Synonyms: NONE  
CAS Number: SEE INGREDIENT STATEMENT, SECTION III.  
EPA Number: 5905-519

II. PHYSICAL DATA

Boiling Point: >363 DEGREES F.  
Freezing Point: <41 DEGREES F.  
Spec Gravity: 1.068 GMS/CC  
Vapor Pressure: 0.5 MM HG @ 20 C.  
Vapor Density: <4.6  
Solubility: EMULSIFIES  
Volatiles: APPROXIMATE 25%  
Evaporation: 0.03  
Melting Point: NOT APPLICABLE  
Appearance: CLEAR, DEEP ORANGE LIQUID, AROMATIC ODOR

III. INGREDIENTS

Material	CAS Number	Percent	TLV	Hazard
TRIFLURALIN (ALPHA, ALPHA, ALPHA-TRIFLUORO-2,6-DINITRO-N,N-DIPROPYL-P-TOLUIDINE)	01582-09-8	43.00	NOT ESTABLISHED	SKIN & EYE IRRITANT, SKIN SENSITIZER
AROMATIC HYDROCARBON	64742-94-5	42.00	50 MG/M3	SKIN & EYE IRRITANT
INERT INGREDIENTS		5.00	NONHAZARDOUS	NONHAZARDOUS

IV. FIRE AND EXPLOSION HAZARD

Flash Point: >200 DEGREES F.  
Autoignition Temp: >800 DEGREES F.  
Flammable Limit: 1.8% - 11.7%  
Extinguishing Media: DRY CHEMICAL, CARBON DIOXIDE, WATER AND FOAM.  
Special Fire Fight Proc: WEAR SELF-CONTAINED BREATHING APPARATUS WITH FULL FACE PIECE OPERATED IN PRESSURE DEMAND OR OTHER POSITIVE PRESSURE MODE AND FULL FIRE FIGHTING PROTECTIVE CLOTHING.  
Fire and Expl Hazard: PRODUCT CLASSIFIED AS A CLASS IIIB COMBUSTIBLE

Material Safety Data Sheet

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LIQUID ACCORDING TO NFPA CODE 30. CLOSED CONTAINERS MAY RUPTURE DUE TO PRESSURE BUILD-UP WHEN SUBJECTED TO EXCESSIVE HEAT OR FIRE.

V. HEALTH HAZARD

Carcinogen Information: NONE CURRENTLY KNOWN

ACUTE EFFECTS OF OVER EXPOSURE

- Swallowing: TRIFLURALIN IS CONSIDERED ONLY SLIGHTLY TOXIC; HOWEVER, THE SOLVENT MAY CAUSE POISONING IF INGESTED. ORAL LD50 (RATS) IS GREATER THAN 10,000 MG/KG.
- Skin Absorption: HARMFUL IF ABSORBED THROUGH SKIN. AVOID CONTACT WITH SKIN OR CLOTHING.
- Inhalation: HIGH VAPOR/AEROSOL CONCENTRATIONS ARE IRRITATING TO THE RESPIRATORY TRACT.
- Skin contact: CAUSES SLIGHT TO MODERATE IRRITATION. REPEATED CONTACT CAN SENSITIZE THE SKIN TO THIS MATERIAL.
- Eye Contact: CAUSES IRRITATION WITH POSSIBLE TISSUE AND CORNEAL OPACIFICATION.
- Chronic Effects: SKIN IRRITATION AND RASH; NAUSEA, VOMITING, CRAMPING, & DIARRHEA; EYE IRRITATION; DIZZINESS, HEADACHE, FEVER AND/OR CHILLS; AND MUSCLE ACHES OR WEAKNESS.
- Other Hazard: INDIVIDUALS WITH KNOWN HYPERSENSITIVITY TO TRIFLURALIN SHOULD NOT BE EXPOSED. INDIVIDUALS WITH ALLERGIC HISTORY OR PRE-EXISTING DERMATITIS SHOULD USE EXTRA CARE IN HANDLING TRIFLURALIN.

EMERGENCY AND FIRST AID PROCEDURES

- Swallowing: DO NOT INDUCE VOMITING! CALL A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. DO NOT INDUCE VOMITING OR GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.
- Skin: REMOVE CONTAMINATED CLOTHING. WASH AFFECTED AREA WITH SOAP AND WATER. IF IRRITATION DEVELOPS OR PERSISTS, CONSULT A PHYSICIAN.
- Inhalation: REMOVE FROM EXPOSURE AREA. IF BREATHING HAS STOPPED, PERFORM ARTIFICIAL RESPIRATION. OBTAIN MEDICAL ATTENTION IMMEDIATELY.
- Eyes: FLUSH EYES WITH WATER FOR 15 MINUTES, HOLDING EYELIDS OPEN. IF IRRITATION DEVELOPS OR PERSISTS, CONSULT A PHYSICIAN.

Material Safety Data Sheet

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Notes to Physician: NO SPECIFIC ANTIDOTE, GIVE SUPPORTIVE CARE. TREATMENT BASED ON JUDGEMENT OF THE PHYSICIAN IN RESPONSE TO REACTIONS OF THE PATIENT. THIS PRODUCT CONTAINS AN AROMATIC HYDROCARBON AND CAN BE EXTREMELY HARMFUL IF SWALLOWED. IF THIS HAPPENS AND THE PATIENT IS CONSCIOUS, IMMEDIATELY ADMINISTER ACTIVATED CHARCOAL (6-8 HEAPING TEASPOONFULS) WITH WATER. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. GASTRIC LAVAGE WITH A CUFFED ENDOTRACHEAL TUBE TO PREVENT ASPIRATION SHOULD BE COMPLETED WITHIN 15 MINUTES. IN THE ABSENCE OF DEPRESSION, CONVULSIONS, OR IMPAIRED GAG REFLEX, VOMITING CAN BE INDUCED WITH A BLUNT INSTRUMENT OR FINGER. MAKE CERTAIN VOMITUS IS NOT INHALED BY RAISING HIPS HIGHER THAN HEAD. IF PATIENT IS UNCONSCIOUS, DO NOT INDUCE VOMITING.

VI. REACTIVITY

Stability: Stable  
Conditions to Avoid: AVOID EXCESSIVE HEAT AND SOURCES OF IGNITION.  
Polymerization: Will Not Occur  
Conditions to Avoid: NONE CURRENTLY KNOWN.  
Incompatibility material: AVOID CONTAMINATION WITH STRONG OXIDIZING AND REDUCING AGENTS OR STRONG ALKALI.  
Hazardous Combustion: FLUORINE COMPOUNDS AND OXIDES OF NITROGEN. INCOMPLETE COMBUSTION MAY LEAD TO CARBON MONOXIDE.

VII. SPILL OR LEAK PROCEDURES

Spill or Leak Proc: ROPE OFF CONTAMINATED AREA & CONTAIN THE SPILL. ABSORB THE MATERIAL WITH CLAY OR SAWDUST AND PUT INTO SUITABLE CONTAINERS FOR DISPOSAL. DO NOT CONTAMINATE WATER WITH WASTE OR CLEANUP MATERIAL. THIS MATERIAL IS TOXIC TO FISH.  
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: IF WORK AREA IS NOT WELL VENTILATED, USE A NIOSH RESPIRATOR APPROVED FOR ORGANIC SOLVENT

Material Safety Data Sheet

Effective Date: 12-JUN-2001  
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VAPORS.

Ventilation: MAINTAIN ODOR FREE ATMOSPHERE. USE MECHANICAL DEVICES IF VENTILATION IS NOT ADEQUATE.

Gloves: IMPERVIOUS GLOVES.

Eyes: CHEMICAL WORKERS GOGGLES.

Other: USE COVERALLS, IMPERVIOUS APRON AND FOOTWEAR. A SAFETY SHOWER AND EYE WASH SHOULD BE PROVIDED IN WORK AREA.

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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 MIX WITH ANY MATERIAL NOT MENTIONED ON THE PRODUCT LABEL. END-USE PRODUCT: THIS PESTICIDE IS TOXIC TO FISH. DO NOT APPLY TO WATER OR WETLANDS. DRIFT OR RUN-OFF FROM TREATMENT AREAS MAY BE HAZARDOUS TO AQUATIC ORGANISMS IN NEIGHBORING AQUATIC SITES. DO NOT CONTAMINATE WATER WHEN DISPOSING OF EQUIPMENT WASHWATER OR RINSATE.

Other precaution: A) RCRA HAZARDOUS WASTE NUMBER: NAPHTHALENE (U165)  
B) SARA TITLE III, SECTION 313: TRIFLURALIN (44.50%), NAPHTHALENE (4.2%).  
C) CERCLA REPORTABLE QUANTITY: 2.5 GALLON  
D) 49 CFR 172.101, APPENDIX A: HAZARDOUS SUBSTANCE  
E) 49 CFR 172.101, APPENDIX B: MARINE POLLUTANT

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X. SHIPPING INFORMATION  
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Shipping name: RQ, ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S., (TRIFLURALIN), 9, UN3082, PG III, MARINE POLLUTANT "ERG #171"

Hazard Class: CLASS 9

Identification No: UN3082

Labels Required: CLASS 9

Placarding: UN3082

Freight Class: COMPOUND, WEED KILLING, LIQUID, (HERBICIDES), N.O.I. (NMFC ITEM 50320, CLASS 60)

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08-APR-2002 13:32:17  
Page 5 Of 5

Material Safety Data Sheet

Effective Date: 12-JUN-2001  
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Chemical Name	Equivalent R.Q.
TRIFLURALIN ----- CAS #1582-09-8	10 LBS/4.54 KG
NAPHTHALENE ----- CAS #0091-20-3	100 LB/45.4 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: 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

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