

# **Material Safety Data Sheet**

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## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

TRIOX(R) Vegetation Killer

PRODUCT NUMBER(S): UPC04302A UPC04304

COMPANY IDENTIFICATION

EMERGENCY TELEPHONE NUMBERS

The SOLARIS Group
A Division of the Agricultural Group
of Monsanto Company
P.O. Box 5008
San Ramon, CA 94583-0808

HEALTH (24 HR): (800)454-2333 TRANSPORTATION (24 HR): (800)454-2333

PRODUCT INFORMATION: (800)225-2883

SPECIAL NOTES: EPA Req. No. 239-2381

# 2. COMPOSITION/INFORMATION ON INGREDIENTS

100.0 % TRIOX(R) Vegetation Killer

CONTAINING

COMPONENTS AMOUNT LIMIT/OTY AGENCY/TYPE

PROMETON

Chemical Name: 1,3,5-TRIAZINE-2,4-DIAMINE,6-METHOXY-N,N'-BIS(1-METHYLETHYL CAS1610180 < 1.9%

INERT INGREDIENTS

< 98.2%

"Inert Ingredients" is a term defined by the U.S. Environmental Protection Agency under the Federal Insecticide, Fungicide and Rodenticide Act (40 CFR 158.153). It refers to any substance, other than an active ingredient, which is intentionally added to a pesticide

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NDA - No Data Available NA - Not Applicable

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1) by the Toxicology and Health Risk Assessment Unit, CRTC, P.O. Box 4054, Richmond, CA 94804

product. Some inert ingredents may be hazardous chemicals, as defined by the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200). The hazards associated with these inert ingredients have been included in this document.

#### LABEL COMMENT:

THIS PRODUCT IS LABELED FOR HOMEOWNER USE ONLY. IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN ANY MANNER NOT PRESCRIBED ON THE LABEL.

This Material Safety Data Sheet (MSDS) contains health, safety and environmental information for you and your employees. It does not replace the precautionary use, storage and disposal information presented on the product label. This information will help you to prepare for emergency response and to meet community right-to-know/ emergency response and reporting requirements under SARA Title III and many other laws. Emergency response agencies and health care providers will also find this additional information useful.

Homeowner consumer use, storage and disposal are regulated by the EPA through the approved label copy, and it is a violation of Federal law to use the product in any manner not prescribed on the EPA-approved label. In order to avoid confusion, this MSDS should not be distributed to homeowner consumers.

Although an MSDS is not required for a consumer product used by the homeowner, we provide this MSDS for employers who handle or store large quantities of this product (e.g. transporters, warehouses and retailers).

This MSDS should also be made available to any employee whose exposure to the product in quantity, frequency or duration may be greater than that of a homeowner consumer.

This MSDS should be supplied to subsequent transporters, shippers, warehouses, retailers or employers where handling, storing or use of this product exceed in quantity, frequency or duration those of a homeowner consumer.

TLV - Threshold Limit Value TWA - Time Weighted Average

STEL - Short-term Exposure Limit TPQ - Threshold Planning Quantity

RQ - Reportable Quantity PEL - Permissible Exposure Limit

CAS - Chemical Abstract Service Number

Al-5 - Appendix A Categories () - Change Has Been Proposed

## 3. HAZARDS IDENTIFICATION

# \* EMERGENCY OVERVIEW \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Amber liquid

- CAUSES EYE IRRITATION
- AVOID CONTACT WITH SKIN OR CLOTHING
- HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH THE

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- SKIN
- COMBUSTIBLE
- KEEP OUT OF REACH OF CHILDREN

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#### POTENTIAL HEALTH EFFECTS

#### EYE:

This substance is a moderate eye irritant and could cause prolonged (weeks) impairment of your vision. The degree of the injury will depend on the amount of material that gets into the eye and the speed and thoroughness of the first aid treatment.

#### SKIN:

This substance may cause skin irritation on prolonged or frequently repeated contact. This substance is slightly toxic to internal organs if absorbed through the skin. The degree of injury will depend on the amount absorbed.

#### INGESTION:

This substance is slightly toxic to internal organs if swallowed. The degree of injury will depend on the amount absorbed from the gut. Because of the low viscosity of this substance, it can directly enter the lungs if it is swallowed (this is called aspiration). This can occur during the act of swallowing or when vomiting the substance. Once in the lungs, the substance is very difficult to remove and can cause severe injury to the lungs and death.

#### INHALATION:

If inhaled, this substance is considered practically non-toxic to internal organs. Breathing the vapor may be irritating to the respiratory tract.

# SIGNS AND SYMPTOMS OF EXPOSURE:

EYE: May include pain, tears, swelling, redness, and blurred vision. SKIN: May include pain or a feeling of heat, discoloration, swelling, and blistering. INHALATION: Respiratory tract irritation may include, but may not be limited to, one or more of the following: nasal discharge, sore throat, coughing, bronchitis, pulmonary edema and difficulty in breathing.

#### 4. FIRST AID MEASURES

# EMERGENCY NUMBER (24 hr): (800)454-2333

#### EVE:

Flush eyes immediately with fresh water for at least 15 minutes while holding the eyelids open. Remove contact lenses if worn. If irritation persists, see a doctor.

#### SKIN:

Remove contaminated clothing. Wash skin thoroughly with soap and water. See a doctor if any signs or symptoms described in this document occur. Discard contaminated non-waterproof shoes and boots. Wash contaminated clothing.

## INGESTION:

If swallowed, give water or milk to drink and telephone for medical advice. DO NOT make person vomit unless directed to do so by medical personnel. If medical advice cannot be obtained, then take the person and

Revision Number: 6 Revision Date: 12/24/93 MSDS Number: 003895 NDA - No Data Available NA - Not Applicable product container to the nearest medical emergency treatment center or hospital.

#### INHALATION:

If respiratory irritation or any signs or symptoms as described in this document occur, move the person to fresh air. If any of these effects continue, see a doctor.

#### NOTE TO PHYSICIANS:

Ingestion of this product or subsequent vomiting can result in aspiration of light hydrocarbon liquid which can cause pneumonitis.

#### 5. FIRE FIGHTING MEASURES

#### FLAMMABLE PROPERTIES

FLASH POINT: (SETA) 120F (49C)

AUTOIGNITION: NDA

FLAMMABILITY LIMITS (% by volume in air): Lower: NDA Upper: NDA

EXTINGUISHING MEDIA:

CO2, dry chemical, foam and water fog.

NFPA RATINGS: Health 2; Flammability 2; Reactivity 0.

#### FIRE FIGHTING INSTRUCTIONS:

Liquid evaporates and forms vapor (fumes) which can catch fire and burn with explosive violence. Invisible vapor spreads easily and can be set on fire by many sources such as pilot lights, welding equipment, and electrical motors and switches. Fire hazard is greater as liquid temperature rises above 85 F.

Products of combustion from fires involving this material may be toxic. Avoid breathing smoke and mists. Avoid personnel and equipment contact with fallout and runoff. Minimize the amount of water used for fire fighting. Do not enter any enclosed area without full protective equipment, including self-contained breathing equipment. Contain and isolate runoff and debris for proper disposal. Decontaminate personal protective equipment and fire fighting equipment before reuse. Read the entire document.

## COMBUSTION PRODUCTS:

Normal combustion forms carbon dioxide and water vapor and may produce oxides of sulfur and phosphorus. Incomplete combustion can produce carbon monoxide.

#### 6. ACCIDENTAL RELEASE MEASURES

## ACCIDENTAL RELEASE MEASURES:

Eliminate all open flame in vicinity of spill or released vapor. Clean up spills immediately, observing precautions in Exposure Controls/ Personal Protection section. Cover spill with a generous amount of Oil Dry, cat litter, clay, rags or other absorbent. Use a stiff broom to mix thoroughly. Sweep up and place in a disposable container. Scrub contaminated area with detergent and water using a stiff broom. Pick up liquid with additional absorbent and place in a disposable container.

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## 7. HANDLING AND STORAGE

#### HANDLING AND STORAGE:

READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.

DO NOT USE OR STORE near flame, sparks or hot surfaces. USE ONLY IN WELL VENTILATED AREA. DO NOT weld, heat or drill container. Replace cap or bung. Emptied container still contains hazardous or explosive vapor or liquid. Keep pesticide in original container. Do not store or transport near food or feed.

Do not apply directly to water or wetlands. Do not contaminate water by cleaning of equipment or disposal of waste. For help with any spill, leak, fire or exposure involving this material, call day or night (800) 454-2333.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### PERSONAL PROTECTIVE EQUIPMENT

## EYE/FACE PROTECTION:

Do not get this material in your eyes. Eye contact can be avoided by wearing chemical goggles.

#### SKIN PROTECTION:

Avoid contact with skin or clothing. Skin contact should be minimized by wearing protective clothing including gloves.

# RESPIRATORY PROTECTION:

This material may be an inhalation hazard and, unless ventilation is adequate, the use of approved respiratory protection is recommended.

## ENGINEERING CONTROLS:

Use this material only in well ventilated areas.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DESCRIPTION:

Amber liquid

pH: NDA

VAPOR PRESSURE: <10 mm Hg @ 25C

VAPOR DENSITY

(AIR=1): 4.5

BOILING POINT: 300F (approx.)

FREEZING POINT: NDA MELTING POINT: <-50F

SOLUBILITY: Miscible in water; soluble in most organic solvents.

SPECIFIC GRAVITY: 0.88 q/cc @ 20C

DENSITY: NDA

EVAPORATION RATE:  $0.2 mtext{(n-BuAc} = 1)$ 

PERCENT VOLATILE

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(VOL):

98%

## 10. STABILITY AND REACTIVITY

#### HAZARDOUS DECOMPOSITION PRODUCTS:

NDA

#### CHEMICAL STABILITY:

Stable.

#### CONDITIONS TO AVOID:

No data available.

## INCOMPATIBILITY WITH OTHER MATERIALS:

May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

#### HAZARDOUS POLYMERIZATION:

Polymerization will not occur.

# 11. TOXICOLOGICAL INFORMATION

#### EYE EFFECTS:

Corneal involvement or irritation clearing in 7 days or less.

# SKIN EFFECTS:

Mild to slight irritation at 72 hours. (No irritation or slight erythema.) The dermal LD50 in rabbits is greater than 5 g/kg.

#### ACUTE ORAL EFFECTS:

The oral LD50 in male rats is 4.44 g/kg. The oral LD50 in female rats is 4.27 g/kg.

#### ACUTE INHALATION EFFECTS:

The 4-hour inhalation LC50 in rats is greater than 5 mg/l for the product diluted at a ratio of 1:3.

# 12. ECOLOGICAL INFORMATION

# ECOTOXICITY:

This material is toxic to aquatic organisms and should be kept out of sewage and drainage systems and all bodies of water.

#### **ENVIRONMENTAL FATE:**

No data available.

## 13. DISPOSAL CONSIDERATIONS

## DISPOSAL CONSIDERATIONS:

Partially filled container may be disposed of by securely wrapping original container in several layers of newspaper and discard in trash. Do not reuse empty container.

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# 14. TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

DOT SHIPPING NAME: N/A DOT HAZARD CLASS: NONE

DOT IDENTIFICATION NUMBER: NONE

DOT PACKING GROUP: N/A

# 15. REGULATORY INFORMATION

SPECIAL NOTES: EPA Reg. No. 239-2381

SARA 311 CATEGORIES: 1. Immediate (Acute) Health Effects: YES

2. Delayed (Chronic) Health Effects: NO

3. Fire Hazard: YES

4. Sudden Release of Pressure Hazard: NO

5. Reactivity Hazard:

#### REGULATORY LISTS SEARCHED:

01=SARA 313	11=NJ RTK	21=TSCA Sect 4(e)
02=MASS RTK	12=CERCLA 302.4	22=TSCA Sect 5(a)(2)
03=NTP Carcinogen	13=MN RTK	23=TSCA Sect 6
04=CA Prop 65-Carcin	14=ACGIH TWA	24=TSCA Sect 12(b)
•	15=ACGIH STEL	25=TSCA Sect 8(a)
06=IARC Group 1	16=ACGIH Calc TLV	26=TSCA Sect 8(d)
07=IARC Group 2A	17=OSHA PEL	27=TSCA Sect 4(a)
08=IARC Group 2B	18=DOT Marine Pollutant	28=Canadian WHMIS
09=SARA 302/304	19=Chevron TWA	29=OSHA CEILING
10=PA RTK	20=EPA Carcinogen	30=Chevron STEL

None of the components of this material are found on the regulatory lists indicated.

## 16. OTHER INFORMATION

NFPA RATINGS: Health 2; Flammability 2; Reactivity 0; HMIS RATINGS: Health 2; Flammability 2; Reactivity 0;

(Least-0, Slight-1, Moderate-2, High-3, Extreme-4). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

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#### REVISION STATEMENT:

This Material Safety Data Sheet has been revised to comply with the ANSI Z400.1 Standard. Changes have also been made throughout this MSDS. Please read the entire document.

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The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modification of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.