

MAY 31 1994

SOLARIS

Material Safety Data Sheet

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

ORTHO Pruning Sealer

PRODUCT NUMBER(S): UPC01071B

COMPANY IDENTIFICATION

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

EMERGENCY TELEPHONE NUMBERS

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

PRODUCT INFORMATION: (800)225-2883

SPECIAL NOTES: EPA Reg. No. Ex 50

2. COMPOSITION/INFORMATION ON INGREDIENTS

100.0 % ORTHO Pruning Sealer

CONTAINING

COMPONENTS	AMOUNT	LIMIT/QTY	AGENCY/TYPE
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OXIDIZED ASPHALT Chemical Name: OXIDIZED ASPHALT CAS64742934	60.0%		
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AND

SOLVENT NAPHTHA, MED. ALIPHATIC Chemical Name: SOLVENT NAPHTHA (PETROLEUM), MEDIUM ALIPHATIC CAS64742887			
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METHYL CHLOROFORM

Revision Number: 5 Revision Date: 12/23/93 MSDS Number: 003084
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, CRTIC, P.O. Box 4054, Richmond, CA 94804

X-DOS061 (9-93)

Chemical Name: ETHANE,1,1,1-TRICHLORO-			
CAS71556	25.0%	350 ppm	ACGIH TWA
		2460 mg/m3	ACGIH STEL
		1900 mg/m3	OSHA PEL
		1,000 LBS	CERCLA 302.4 RQ

PROPANE

Chemical Name: PROPANE			
CAS74986	15.0%	Asphyxiant	ACGIH TWA
		1800 mg/m3	OSHA PEL

COMPOSITION COMMENT:

All the components of this material are on the Toxic Substances Control Act Chemical Substances Inventory.

LABEL COMMENT:

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
C - Ceiling Limit	CAS - Chemical Abstract Service Number
A1-5 - Appendix A Categories	() - Change Has Been Proposed

3. HAZARDS IDENTIFICATION

***** EMERGENCY OVERVIEW *****

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NDA - No Data Available	NA - Not Applicable	

Thick, black liquid in aerosol canister

- HARMFUL IF SWALLOWED
- AVOID CONTACT WITH EYES, SKIN OR CLOTHING
- EXTREMELY FLAMMABLE
- CONTENTS UNDER PRESSURE
- KEEP OUT OF REACH OF CHILDREN

POTENTIAL HEALTH EFFECTS

EYE:

The eye irritation potential of this substance has not been determined. However, it may be slightly irritating to the eyes and could cause prolonged (days) 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:

The skin irritation potential of this substance has not been determined. However, it may be a moderate skin irritant so contact with the skin could cause prolonged (days) injury to the affected area. The degree of injury will depend on the amount of material that gets on the skin and the speed and thoroughness of the first aid treatment. The systemic toxicity of this substance has not been determined. However, it should be practically non-toxic to internal organs if it gets on the skin. Read the Toxicology Information section (11) of this document for more information.

INGESTION:

The systemic toxicity of this substance has not been determined. However, it should be practically non-toxic to internal organs if swallowed. Read the Toxicology Information section (11) of this document for more information.

INHALATION:

The systemic toxicity of this substance has not been determined. However, it should be practically non-toxic to internal organs if inhaled. Read the Toxicological Information section (11) of this document for more information.

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.

4. FIRST AID MEASURES

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

EYE:

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:

Wash skin with white mineral oil. Wipe off excess and wash thoroughly with soap and water. If irritation occurs, see a doctor.

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INGESTION:

If swallowed, give water or milk to drink and telephone for medical advice. Consult medical personnel before inducing vomiting. If medical advice cannot be obtained, then take the person and product container to the nearest medical emergency treatment center or hospital.

INHALATION:

If respiratory discomfort or irritation occurs, move the person to fresh air. See a doctor if discomfort or irritation continues.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: TOC 100F (38C) for product

AUTOIGNITION: NDA

FLAMMABILITY LIMITS (% by volume in air): Lower: NDA Upper: NDA
Level III Aerosol NFPA30B

EXTINGUISHING MEDIA:

CO2, Dry Chemical, Foam and Water Fog.

NFPA RATINGS: Health 1; Flammability 4; Reactivity 0.

FIRE FIGHTING INSTRUCTIONS:

This product presents an extreme fire hazard. Liquid very quickly evaporates, even at low temperatures, 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.

For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment. This may include self-contained breathing apparatus to protect against the hazardous effects of normal products of combustion or oxygen deficiency. Read the entire document.

COMBUSTION PRODUCTS:

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

6. ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES:

Clean up spills immediately, observing precautions in Exposure Controls/ Personal Protection section. Eliminate all sources of ignition in vicinity of spill or released vapor. 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.

Store in accordance with NFPA 30B for a Level III aerosol.

DO NOT USE OR STORE near flame, sparks or hot surfaces. USE ONLY IN WELL VENTILATED AREA.

CONTAINER UNDER PRESSURE.

Exposure to heat or prolonged exposure to sun may cause container to burst. Do not puncture, incinerate or store above 130F.

Do not use on household pets or humans.

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:

No special respiratory protection is normally required. However, if operating conditions create high airborne concentrations, the use of an approved respirator is recommended.

ENGINEERING CONTROLS:

Use adequate ventilation to keep the airborne concentrations of this material below the recommended exposure standard.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DESCRIPTION:

Thick, black liquid in aerosol canister

pH: NDA
VAPOR PRESSURE: 47 - 63 PSI
VAPOR DENSITY
(AIR=1): > 1
BOILING POINT: NA
FREEZING POINT: NDA
MELTING POINT: NA
SOLUBILITY: Soluble in hydrocarbon solvents; insoluble in water.
SPECIFIC GRAVITY: 0.96 @ 20/20C (min.)

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NDA - No Data Available NA - Not Applicable

DENSITY: NDA
EVAPORATION RATE: NDA
PERCENT VOLATILE
(VOL): 71.2%

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:

No product toxicology data available. The hazard evaluation was based on data from similar materials.

SKIN EFFECTS:

No product toxicology data available. The hazard evaluation was based on data from similar materials.

ACUTE ORAL EFFECTS:

No product toxicology data available. The hazard evaluation was based on data from similar materials.

ACUTE INHALATION EFFECTS:

No product toxicology data available. The hazard evaluation was based on data from similar materials.

ADDITIONAL TOXICOLOGY INFORMATION:

No association has been established between industrial exposure to petroleum asphalt and cancer in humans. The International Agency for Research on Cancer (IARC) reviewed the carcinogenic potential of asphalts in monograph 35. They concluded that there was insufficient evidence that undiluted, air-refined asphalt was carcinogenic to animals, while there was only limited evidence that steam-refined asphalts were carcinogenic to animals. Additionally, there was insufficient evidence to conclude that asphalts were carcinogenic to human beings. Studies in which mice were exposed to a variety of whole asphalts did not result in any increased cancer rate; mice exposed to asphalts diluted with hydrocarbon solvents had increased incidence of certain types of cancer. The petroleum solvent contained in this product may increase the potential for cancer following prolonged and repeated skin contact. Brief or intermittent skin contact with this asphalt product is not expected to produce any delayed effects. While normal handling of this product is not likely to cause cancer in humans, skin contact and breathing of mists, fumes or vapors should be

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reduced to a minimum.

12. ECOLOGICAL INFORMATION

ECOTOXICITY:

No data available.

ENVIRONMENTAL FATE:

No data available.

13. DISPOSAL CONSIDERATIONS

DISPOSAL CONSIDERATIONS:

Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. Contact local environmental or health authorities for approved disposal of this material.

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: CONSUMER COMMODITY
 DOT HAZARD CLASS: ORM-D
 DOT IDENTIFICATION NUMBER: NONE
 DOT PACKING GROUP: N/A

15. REGULATORY INFORMATION

SPECIAL NOTES: EPA Reg. No. Ex 50

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: YES
 5. Reactivity Hazard: NO

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)

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05=CA Prop 65-Repro Tox	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

The following components of this material are found on the regulatory lists indicated.

ETHANE,1,1,1-TRICHLORO-

is found on lists: 01,02,10,11,12,13,14,15,17,18,24,27,28,

PROPANE

is found on lists: 02,10,11,13,14,17,

16. OTHER INFORMATION

NFPA RATINGS: Health 1; Flammability 4; Reactivity 0;

HMIS RATINGS: Health 1; Flammability 4; 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).

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.

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.

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