

**KNOX FERTILIZER COMPANY, INC.**

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# MATERIAL SAFETY DATA SHEET

**Treflan® 500 Granules**

Treflan® is a registered trademark of Dow Agri-Science  
APPROVAL DATE: 3/31/93  
SUPERSEDES: 01/92

**I. PRODUCT IDENTIFICATION**

**Product Name**..... Treflan® 500 Granules  
**Common Name(s)**.Pre-emergence Weed Control  
**UN/MA #**.....N/A 1993 **DOT Hazard Class**.....N/A  
**Shipping Name**.....Compound Weed Killing, Dry

**II. INGREDIENTS & RECOMMENDED OCCUPATIONAL EXPOSE LIMITS**

Exposure Limits \_\_\_\_\_  
Material-Formula-Cas. No.-% Wt.-Osha-Pel-Acgh-TLV \*SEE Addendum I

**III. PHYSICAL DATA**

**Vapor Pressure**.....N/A  
**Vapor Density**.....N/E  
**Solubility In Water**.....Not soluble  
**Appearance and Odor**.....Bright orange

**IV. FIRE AND EXPLOSION HAZARD DATA**

**Flash Point**(Method).....N/A  
**NFPA Rating**.....Health 1 - Fire 0 - Reactivity 0 - Special Hazard 0  
**Flammable Limits**(Lel).....N/A (Uel).....N/A  
**Extinguishing Media**.....Water, foam, carbon dioxide or dry chemicals

**SPECIAL FIRE FIGHTING PROCEDURES:** May emit noxious and toxic fumes when heated to decomposition. Self-contained breathing apparatus should be used.

\*This information is taken from sources or based upon data believed to reliable; however, Knox Fertilizer Company, Inc. makes no warranty as to the absolute correctness or sufficiency of any of the foregoing or that additional or other measures may not be required under particular conditions.

**V. REACTIVITY DATA**

**Stability**.....This is a stable material.  
**Conditions to avoid**.....Avoid freezing  
**Incompatibility**.....Do not store near heat or flame  
**Hazardous Products**.....Will emit toxic vapors as it burns.  
**Hazardous Polymerization**..Will not occur.

**VI. SPILL OR LEAK PROCEDURES**

Steps to be taken in case material is released: In case of release to the environment, report spills to the National Response Center 1-800-424-8802.

**Suggested Local Action:** Do not contaminate any body of water. Clean up spill and apply as per label or dispose as waste.

Waste Disposal Method: (EPA Waste Identification No.; N/A) If contaminated with other materials, the nature and extent of contamination may require the use of specialized disposal methods. If disposal is necessary, comply with all local, state and federal regulations. Contact your local EPA office for information.

**For Hazardous Waste Regulation call 1-800-424-9346 – the RCRA Hotline**

**VII. HEALTH HAZARD DATA**

**EFFECTS OF OVEREXPOSURE**... as indicated below are for the unimpregnated fertilizer, for health information on any active pesticide ingredients refers to attached suppliers material safety sheets (See Addendum). Except under conditions of severe overexposure, this fertilizer is regarded to have a relatively low acute health hazard.

**Inhalation:** Extremely high concentrations of fertilizer dust are typically self-limited due to the nuisance conditions they create. Over exposure may produce irritation of the mucous membranes, nose throat, coughing, and shortness of breath. In Addition, certain fertilizers may contain small amounts of silica particles are capable of causing silicosis if inhaled in 5 mm in diameter. These silica particles are capable of causing silicosis if inhaled in high enough concentrations over an extended period of time. The principal manifestation of silicosis is difficulty in breathing. This condition can progress to dry cough, shortness of breath on exertion, decreased lung function and pulmonary fibrosis.

**SKIN CONTACT:** May cause irritation, particular on damp skin. Repeated or prolonged contact could lead to dermatitis.

**EYE CONTACT:** May cause irritation and conjunctivitis.

**INGESTION:** May produce nausea, vomiting, abdominal discomfort and, if swallowed in very large amounts, may cause increased urination and central nervous system depression.

**EMERGENCY AND FIRST AID PROCEDURE**

**INHALATION:** Remove from exposure. If breathing is difficult or has stopped, administer artificial respiration or oxygen as indicated. Immediately seek medical aid.

**SKIN CONTACT:** Wash skin thoroughly with soap and water. Seek medical aid.

**EYE CONTACT:** Flush immediately with large amounts of water, lifting the lower and upper lids occasionally. Seek medical aid.

**INGESTION:** Give 1-2 large glasses of water or milk. Induce vomiting. Immediately seek medical aid. Never give liquids to an unconscious person.

**VIII. SPECIAL PROTECTION INFORMATION**

**RESPIRATORY:** Respiratory protection approved by NIOSH/MSHA for protection against pesticides should be used to avoid inhalation. Appropriate respiration selection depends on the type and magnitude of over exposure.

**SKIN:** Clean, body-covering clothing should be worn to prevent irritation in situations where direct contact with product may occur.

**EYES:** Employees should be required to wear chemical safety splash goggles in situations where direct contact with the product may result in eye injury.

**VENTILATION:** Local exhaust ventilation should be used to control worker exposure to below recommended Permissible Exposure Levels (PEL).

**OTHER PROTECTIVE EQUIPMENT:** Emergency eye wash stations and deluge safety showers should be available in the work area.

**IX. SPECIAL PRECAUTIONS**

**PRECAUTION TO BE TAKEN IN HANDLING AND STORAGE:** Store in a cool, dry location. **DO NOT** store near food or feed. Keep out of reach of children and pets.

**OTHER COMMENTS:** Chronic Effects – Long term exposure to dusts containing fluoride or quartz may produce more severe toxicity. Fluoride of the teeth, changes in the kidneys, bones and ligaments, and inhibition of certain enzymes. Chronic exposure and/or high levels of inorganic fluorides administered to experimental animals have been shown to produce changes in several organ and certain enzymes. Adverse reproductive effects have also been suggested. Of the available animal carcinogenicity data, a single in adequately reported study has provided some evidence of the carcinogenicity of sodium fluoride to mice (IAR 27, 237, 82). Quartz dust may produce nodules in the lungs which may gradually progress to formation of fibrous tissue. Symptoms may include coughing, shortness of breath and wheezing.

**ADDENDUM I**

Product Name .....Treflan® 500 Granules Original Issue..... 1/92 Exposure Limits... See below	MSDS .....62719-98-8378 Revised 5/21/01
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**II. INGREDIENTS AND RECOMMENDED OCCUPATIONAL EXPOSURE LIMITS -**

**NOTE:** Consult the guaranteed analysis statement on the above product container to determine which below materials are found in that product.

MATERIALS	FORMULA	CAS. #	% WT.	OSHA-PEL	ACGIH-TLV
Triflurin	A,a,a-Triflur 6-Dinitro-N-N Dipropyl-p-Toulukine	1582-09-8	0-6	NE	NE
Limestone	CaCO3	1317-65-3	0-50	NE	NE
Dolomitic Limestone	CaCO3(+MgCO3)	16389-88-1	0-40	NE	NE
Corncobs (Pulverized)	--	NE	0-60	NE	NE
Calcium Ligosulfonate	--	68131-31-7	0-1	NE	NE
Mineral Oil	--	NE	0-01	NE	NE
Conditioners, Impurities	--	NE	0-01	NE	NE

\*NE – NOT ESTABLISHED

**The following dust limits apply:**

CLASS	OSHA-PEL	SCGIH-TLV
Total Dust (In Air)	15 mg/m3	10 mg/m3
Respirable Dust (In Air)	5 mg/m3	5 mg/m3