*Treflan is a trademark of Dow AgroSciences, LLC

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Treflan HFP

Dow AgroSciences

06/16/09 1281

Dow AgroSciences LLC
PRODUCT NAME: TREFLAN* HFP Herbicide
ISSUE DATE: 06/16/2009
PRINT DATE: 19 Dec 2010

Dow AgroSciences LLC encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: TREFLAN* HFP Herbicide
COMPANY IDENTIFICATION:
Dow AgroSciences LLC
A Subsidiary of The Dow Chemical Company
9330 Zionsville Road
Indianapolis, IN 46268-1189 United States
CUSTOMER INFORMATION NUMBER:
800-992-5994
SDSQuestion@dow.com
EMERGENCY TELEPHONE NUMBER:
24-HOUR EMERGENCY CONTACT:
800-992-5994
LOCAL EMERGENCY CONTACT:
352-323-3500

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:
COLOR: Orange
PHYSICAL STATE: Liquid.
ODOR: Solvent
HAZARDS OF PRODUCT:
DANGER! May cause allergic skin reaction. May cause eye irritation. May cause skin irritation. Aspiration hazard. Can enter lungs and cause damage. Isolate area. Stay out of low areas. Suspect cancer hazard. May cause cancer.
OSHA HAZARD COMMUNICATION STANDARD: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
POTENTIAL HEALTH EFFECTS:
EYE CONTACT: May cause slight eye irritation. May cause slight corneal injury. Vapor may cause eye irritation experienced as mild discomfort and redness.
SKIN CONTACT: Brief contact may cause slight skin irritation with local redness. Prolonged contact may cause skin irritation with local redness. May cause drying and flaking of the skin.
SKIN ABSORPTION: Prolonged skin contact is unlikely to result in absorption of harmful amounts.
SKIN SENSITIZATION: For the active ingredient(s): Skin contact may cause an allergic skin reaction.
INHALATION: No adverse effects are anticipated from single exposure to mist.
INGESTION: Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury.
ASPIRATION HAZARD: Aspiration into the lungs may occur during ingestion or vomiting, causing lung damage or even death due to chemical pneumonia.
EFFECTS OF REPEATED EXPOSURE: For the active ingredient(s): In animals, effects have been reported on the following organs: Liver. Kidney. Blood. For the solvent(s): In animals, effects have been reported on the following organs: Lung. Gastrointestinal tract. Thyroid. Urinary tract. Dose levels producing these effects were many times higher than any dose levels expected from exposure due to use. For the major component(s): Naphthalene. Observations in animals include: Respiratory effects. Cataracts and other eye effects have been reported in humans repeatedly exposed to naphthalene vapor or dust. Ingestion of naphthalene by humans has caused hemolytic anemia. Excessive exposure may cause hemolysis, thereby impairing the blood's ability to transport oxygen.
CANCER INFORMATION: For the active ingredient(s): A low incidence of urinary tract tumors was seen in only 1 of 5 chronic studies in rats with trifluralin. Trifluralin is not anticipated to be a carcinogenic risk to man. For the major component(s): Naphthalene. Has caused cancer in some laboratory animals. In humans, there is limited evidence of cancer in workers involved in naphthalene production. Limited oral studies in rats were negative.
BIRTH DEFECTS/DEVELOPMENTAL EFFECTS: For the active ingredient(s): Trifluralin. Has been toxic to the fetus in laboratory animals at doses toxic to the mother.

3. COMPOSITION INFORMATION

Trifluralin
CAS #: 1582-09-8
AMOUNT: 43.0 %
Naphthalene
CAS #: 91-20-3
AMOUNT: 7.0 %
Balance
AMOUNT: 50.0 %

4. FIRST-AID MEASURES

EYE CONTACT: Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a poison control center or doctor for treatment advice.
SKIN CONTACT: Take off contaminated clothing. Wash skin with soap and plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. Wash clothing before reuse. Shoes and other leather items which cannot be decontaminated should be disposed of properly.
INHALATION: Move person to fresh air. If person is not breathing, call an emergency responder or ambulance, then give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask etc). Call a poison control center or doctor for treatment advice. If breathing is difficult, oxygen should be administered by qualified personnel.
INGESTION: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.
NOTES TO PHYSICIAN: Aspiration into the lungs may occur during ingestion or vomiting, causing tissue damage or lung injury. The decision of whether to induce vomiting or not should be made by a physician. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. No specific antidote.

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Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Have the Safety Data Sheet, and if available, the product container or label with you when calling a poison control center or doctor, or going for treatment. MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Skin contact may aggravate preexisting dermatitis.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Do not use direct water stream. May spread fire. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.
FIRE FIGHTING PROCEDURES: Keep people away. Isolate fire and deny unnecessary entry. Consider feasibility of a controlled burn to minimize environment damage. Foam fire extinguishing system is preferred because uncontrolled water can spread possible contamination. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Burning liquids may be extinguished by dilution with water. Do not use direct water stream. May spread fire. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the "Accidental Release Measures" and the "Ecological Information" sections of this (M)SDS.
SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. Dense smoke is produced when product burns.
HAZARDOUS COMBUSTION PRODUCTS: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Nitrogen oxides. Fluorinated hydrocarbons. Carbon monoxide. Carbon dioxide.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Contain spilled material if possible.
SMALL SPILLS: Absorb with materials such as: Clay. Dirt. Sand. Sweep up. Collect in suitable and properly labeled containers.
LARGE SPILLS: Contact Dow AgroSciences for clean-up assistance.
PERSONAL PRECAUTIONS: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Keep personnel out of low areas. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.
ENVIRONMENTAL PRECAUTIONS: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

7. HANDLING AND STORAGE

HANDLING:General Handling: Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Do not swallow. Keep out of reach of children. Avoid breathing vapor or mist. Use with adequate ventilation. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.
STORAGE: Store in a dry place. Store in original container. Keep container tightly closed when not in use. Do not store near food, foodstuffs, drugs or potable water supplies.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS:
Naphthalene
LIST: ACGIH
TYPE: TWA
VALUE: 10 ppm SKIN
LIST: ACGIH
TYPE: STEL
VALUE: 15 ppm SKIN
LIST: OSHA Table Z-1
TYPE: PEL
VALUE: 50 mg/m(3) 10 ppm
A "skin" notation following the exposure guideline refers to the potential for dermal absorption of the material including mucous membranes and the eyes either by contact with vapors or by direct skin contact. It is intended to alert the reader that inhalation may not be the only route of exposure and that measures to minimize dermal exposures should be considered.
RECOMMENDATIONS IN THIS SECTION ARE FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD SEE THE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING.
PERSONAL PROTECTION:
EYE/FACE PROTECTION: Use chemical goggles. If exposure causes eye discomfort, use a full-face respirator.
SKIN PROTECTION: Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse or dispose of properly. Items which cannot be decontaminated, such as shoes, belts and watchbands, should be removed and disposed of properly.
HAND PROTECTION: Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Chlorinated polyethylene. Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl chloride ("PVC" or "vinyl"). Viton. Examples of acceptable glove barrier materials include: Butyl rubber. Natural rubber ("latex"). Avoid gloves made of: Polyvinyl alcohol ("PVA").
NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/ specifications provided by the glove supplier.
RESPIRATORY PROTECTION: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator. The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.
INGESTION: Avoid ingestion of even very small amounts; do not consume or store food or tobacco in the work area; wash hands and face before smoking or eating.
ENGINEERING CONTROLS:
VENTILATION: Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaustventilation may be necessary for some operations.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid.
COLOR: Orange
ODOR: Solvent
FLASH POINT - CLOSED CUP: 99 deg C (210 deg F) Pensky-Martens Closed Cup ASTM D 93

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