STEL: NE ppm

PROFESSIONAL PREEN 2.5G MSDS

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MANUFACTURER/SUPPLIER: LEBANON SEABOARD CORP.
  1600 E. CUMBERLAND ST.
  LEBANON, PA USA 17042
INFORMATION PHONE: 800-532-0090
HEALTH EMERGENCY: 888-208-1368 PROSAR
ENVIRONMENTAL EMERGENCY: 800-424-9300 CHEMTREC
PHYSICAL/CHEMICAL CHARACTERISTICS:
  BOILING POINT: NA Not applicable.
  MELTING POINT: NG
  FREEZING POINT: NG
  POUR POINT: NG
  SOFTENING POINT: NG
  SPECIFIC GRAVITY: NA Not applicable.
  VAPOR PRESSURE: NA Not applicable.
  VAPOR DENSITY: NA Not applicable.
  PERCENT VOLATILES: NG
  EVAPORATION RATE: NG
  pH: BT 7 8 Aqueous 50/50.
  MOLECULAR WEIGHT: NG
  VISCOSITY: NG
  SOLUBILITY IN WATER: Not applicable.
  ODOR/APPEARANCE/OTHER CHARACTERISTICS: Mild aromatic odor
    / yellow free flowing granule /
    BULK DENSITY: 39-42 lb/ft3
FIRE AND EXPLOSION DATA:
  CLOSED CUP FLASH PT.: NA Not applicable.
  OPEN CUP FLASH POINT: NA Not applicable.
  FIRE POINT: NG
 AUTO IGNITION: EQ 1000 F Does not ign, to 537 deg C
  LOWER EXPLOSION LIMIT: NA Not applicable.
  UPPER EXPLOSION LIMIT: NA Not applicable.
SHIPPING REGULATIONS:
  UN/NA NUMBER: NG
  DOT HAZARD CLASS: NG
  SHIPPING LABEL: Not given
  SHIPPING NAME: Not given
PREPARED:
  PREPARER'S NAME & TITLE: Not given
  PREPARATION DATE: 3/22/10 rev.
COMPONENT(S):
  N-(3-(1-ETHYL-1 METHYLPROPYL)-5-ISOXAZOLY)-2,
    6-DIMETHOXYBENZAMIDE:
    OSHA PEL: NE ppm
    ACGIH TLV: NE ppm
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PERCENT OF PRODUCT: EQ 0.375%
      CAS NO.: 82558507
    NOTE: Isoxaben / NE=Not Established
  ALPHA, ALPHA, ALPHA-TRIFLUORO-2, 6-DINITRO-N, N-DIPROPYL-
    P-TOLUDINE:
    OSHA PEL: NE ppm
    ACGIH TLV: NE ppm
    STEL: NE ppm
    PERCENT OF PRODUCT: EQ 1.500%
     CAS NO.: 1582098
    NOTE: Trifluralin / NE=Not Established
  OTHER INGREDIENTS:
    OSHA PEL: NG ppm
    ACGIH TLV: NG ppm
    STEL: NG ppm
    PERCENT OF PRODUCT: EQ 97.125%
     CAS NO.: Not given
   NOTE: CAS #: NA
  CLAYS:
    OSHA PEL: NG ppm
   ACGIH TLV: NG ppm
   STEL: NG ppm
   PERCENT OF PRODUCT: LE 1.0%
     CAS NO.: 8031183
  PROPRIETARY SURFACTANTS:
   OSHA PEL: NG ppm
   ACGIH TLV: NG ppm
   STEL: NG ppm
   PERCENT OF PRODUCT: NA
     CAS NO.: Not given
Text Section(s)
IDENTIFICATION
______
PRODUCT NAME: Professional Preen 2.5G
EPA REG. NUMBER: 62719-175-961
PRODUCT CODE:
MSDS NUMBER:
GENERAL INFORMATION PHONE 800-532-0090
HEALTH EMERGENCY PHONE: 888-208-1368 PROSAR
ENVIRONMENTAL EMERGENCY PHONE: 800-424-9300 CHEMTREC
MANUFACTURER'S NAME AND ADDRESS:
 LEBANON SEABOARD CORPORATION
 1600 E. CUMBERLAND ST.
 LEBANON, PA 17042-0180
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INGREDIENTS

(% W/W, unless otherwise noted).

See component page(s) for additional information.

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). In addition, other substances not 'Hazardous' per this OSHA Standard may be listed. Where proprietary ingredients shows, the identity may be made available as provided in this standard.

PHYSICAL DATA

See data pages for additional information.

FIRE & EXPLOSION HAZARD DATA

AUTO-IGNITION TEMPERATURE: Does not ignite up to 1000 deg F, 537 deg C.

EXTINGUISHING MEDIA: Use water fog, CO2, or dry chemicals. FIRE AND EXPLOSION HAZARDS: Will emit toxic vapors as it burns.

FIRE-FIGHTING EQUIPMENT: Wear full protective clothing and use positive pressure, self-contained breathing apparatus.

REACTIVITY DATA

STABILITY (CONDITIONS TO AVOID): None known.

INCOMPATIBILITY (SPECIFIC MATERIAL TO AVOID): None known.

HAZARDOUS DECOMPOSITION PRODUCTS: Will emit toxic vapors as it burns.

HAZARDOUS POLYMERIZATION: Does not occur.

ENVIRONMENTAL AND DISPOSAL INFORMATION

ENVIRONMENTAL DATA: This pesticide is toxic to fish. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift or runoff from treatment areas may be hazardous to aquatic organisms in neighboring aquatic sites. Do not contaminate water when disposing of equipment washwaters.

ACTION TO TAKE FOR SPILLS: Contain and sweep up material of small spills and dispose as waste. Large spills report to CHEMTREC for assistance. Prevent runoff.

DISPOSAL METHOD: Do not contaminate water, food, or feed by storage or disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility in accordance with applicable regulations.

ACUTE EXPOSURE:

EYES: Rabbit, irritant.

SKIN: Rabbit, 5000 mg/kg, no deaths or toxicity, slight irritation.

INHALATION: This formulation is not considered to be an inhalation hazard due to coarse granular nature and low potential for aerosolization.

INGESTION: Rat, 2500 mg/kg, no deaths or toxicity.

SENSITIZATION: Guinea pig, not a contract sensitizer.

THE FOLLOWING EFFECTS WERE REPORTED IN CHRONIC,

TERATOGENIC, AND REPRODUCTIVE TOXICITY STUDIES IN

LABORATORY ANIMALS WHERE EXPERIMENTAL DOSAGE LEVELS AND

DURATIONS OF EXPOSURE WERE FAR IN EXCESS OF THOSE LIKELY

TO OCCUR IN HUMANS:

CHRONIC EXPOSURE (ISOXABEN TECHNICAL):

CHRONIC TOXICITY: Increased liver weight, increased liver enzyme activity, liver cell enlargement, noncarcinogenic proliferative liver lesions. Increased kidney weights, chronic kidney tissue inflammation. Grown retardation and decreased survival. Increased blood sugar level.

TERATOLOGY & REPRODUCTION: Not teratogenic. Growth retardation and congenital abnormalities only at maternally toxic doses. No effects of reproductive performance.

MUTAGENICITY: Not mutagenic in either bacterial or mammalian cells.

CARCINOGENICITY: Not listed as a carcinogen or potential carcinogen by IARC, NCI/NTP, OSHA, or ACGIH. Not considered by EPA as a Class C (possible human) carcinogen based upon limited evidence from animal studies.

CHRONIC EXPOSURE (TRIFLURALIN TECHNICAL):

CHRONIC TOXICITY: Growth retardation, reduced food consumption, reduced survival, increased liver weights and kidney toxicity.

TERATOLOGY & REPRODUCTION: Not teratogenic. No impairment of reproductive capacity. Fetotoxic only at maternally toxic does in toxicology studies.

MUTAGENICITY: Not mutagenic in either bacterial or mammalian cells.

CARCINOGENICITY: Determined by NCI to show evidence of carcinogenicity in one study which DowElanco believes is invalid due to nitrosamine impurity. Classified by EPA as a Class C (possible human) carcinogen based upon limited evidence from animal studies. DowElanco believes toxicological studies support noncarcinogen status. Not listed as a carcinogen or potential

carcinogen by ACGIH, IARC, or OSHA. SIGNS AND SYMPTOMS OF EXPOSURE:

ISOXABEN: A macular rash occurred in one worker. EYE CONTACT: May result in irritation.

TRIFLURALIN: There is extensive field experience involving a variety of trifluralin products, some of which contain organic solvents. Events cannot be easily categorized in relation to the various product forms. THE MORE COMMONLY REPORTED ADVERSE EFFECTS FOLLOWING EXPOSURE TO TRIFLURALIN PRODUCTS ARE SKIN IRRITATION AND RASH: Nausea, vomiting, cramping, and diarrhea; eye irritation; dizziness, headache, and other minor central nervous system effects; fever and/or chills; and muscle aches or weakness. Except for some reports of skin or eye irritation, it is difficult to establish a cause/effect relationship. Rare reports of liver dysfunction of hepatitis are usually in the form of inquiries as to possible relationship. There is no substantial evidence that trifluralin is harmful to the liver in humans. Other events reported consist of a diverse variety and constitute singular or rare accounts. Although some may be serious, any possible association with exposure to trifluralin is extremely remote or non-existent.

PRIMARY ROUTES OF ENTRY: Skin and inhalation.

FIRST AID

EYES: Immediately flush eyes with plenty of water. Call a physician if irritation develops.

SKIN: Remove contaminate clothing and clean before reuse. Wash all exposed areas of skin with plenty of soap and water. Get medical attention if irritation develops or persists.

INGESTION: Do not induce vomiting. Call a physician or Poison Control Center. If available, administer activated charcoal (6-8 heaping teaspoonsful) with a large quantity of water. Do not give anything by mouth to an unconscious person. Immediately transport to a medical care facility and see a physician.

INHALATION: Move individual to fresh air. Get medical attention if breathing difficulty occurs. If not breathing, provide artificial respiration assistance (mouth-to-mouth) and call a physician immediately.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: No corroborative information is available that would establish the aggravation of a medical condition by exposure to trifluralin or isoxaben; however, it is a reasonable assumption that highly allergic individuals would be at a somewhat greater risk for demonstrating an

HANDLING PRECAUTIONS

EXPOSURE GUIDELINE(S): Isoxaben, PEL, and TLV not

established; Trifluralin, PEL and TLV not established.
VENTILATION: Good general ventilation should be sufficient

VENTILATION: Good general ventilation should be sufficient for most conditions.

RESPIRATORY PROTECTION: In enclosed spaces, wear NIOSH approved respirator for dust.

SKIN PROTECTION: Use protective clothing such as coveralls, a long sleeved shirt, and impermeable gloves when handling this product.

EYE PROTECTION: Use safety glasses.

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ADDITIONAL INFORMATION

SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:
Keep out of reach of children. Causes eye irritation.
Harmful if swallowed, inhaled or absorbed through skin.
Avoid breathing dust and contact with skin, eyes, or
clothing. Wash thoroughly with soap and water after
handling and before eating, drinking, or using tobacco.
MSDS STATUS: FIRE AND EXPLOSION, ENVIRONMENTAL AND DISPOSAL
INFORMATION, HEALTH HAZARD DATA, ADDITIONAL INFORMATION

REVISED: 3/21/05

Sections.

REGULATORY INFORMATION

(Not meant to be all-inclusive--selected regulations

represented).

SARA 313 INFORMATION: This product contains the following

substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

Chemical Name Cas No. Concentration

Trifluralin 001582-09-8 1.5%

SARA HAZARD CATEGORY: THIS PRODUCT HAS BEEN REVIEWED ACCORDING TO THE EPA "HAZARD CATEGORIES" PROMULGATED UNDER SECTIONS 311 AND 312 OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA TITLE III) AND IS CONSIDERED, UNDER APPLICABLE DEFINITIONS, TO MEET THE FOLLOWING CATEGORIES: An immediate health hazard.

TOXIC SUBSTANCES CONTROL ACT (TSCA): All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

STATE RIGHT-TO-KNOW: The following product components are

cited in certain state lists as mentioned. Non-listed components may be shown in INGREDIENTS section of the MSDS.

Chemical Name	Cas Number	List
Kaolin	001332-58-7	PA1
Trifluralin	001582-09-8	NJ2 NJ3 PA1 PA3

NJ2 = New Jersey Environmental Hazardous Substance (present at greater than or equal to 1.0%).

- NJ3 = New Jersey Workplace Hazardous Substance (present at greater than or equal to 1.0%).
- PA1 = Pennsylvania Hazardous Substance (present at greater than or equal to 1.0%).
- PA3 = Pennsylvania Environmental Hazardous Substance (present at greater than or equal to 1.0%).
- OSHA HAZARD COMMUNICATION STANDARD: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS:

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Category: Rating

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HEALTH: 2.
FLAMMABILITY: 1.
REACTIVITY: 0.

SPECIAL NOTES

The Information Herein Is Given In Good Faith, But No Warranty, Express or Implied, Is Made. Consult The DowElanco Company for Further Information.

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ from one location to another, it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See MSD Sheet for health and safety information.

DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES: although preparer and owner have taken reasonable care in the preparation of this document, we extend no warranties and make no representation as to the accuracy or completeness of the information contained herein, and assume no

responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each user should make a determination as to the suitability of the information for their particular purpose(s). A request has been made to the manufacturer to approve the contents of this material safety data sheet. Upon receipt of any changes a new MSDS will be made available.

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