

# Material Safety Data Sheet

## Knox Fertilizer Company, Inc.

### SECTION 1

### PRODUCT IDENTIFICATION

**TRADE NAME:** *Shaw's® Turf Food with Pendimethalin 86,75*

**EPA REGISTRATION NO:** 8378-67, -69  
**CHEMICAL FAMILY:** Fertilizer with Dinitroaniline Herbicide  
**CHEMICAL NAME/SYNONYMS:** Pendimethalin

**MANUFACTURER/FORMULATOR:** Knox Fertilizer Co., Inc  
P.O. Box 248  
Knox, IN 46534

**EMERGENCY PHONE:** 1.800.424.9300

### SECTION 2

### COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Ingredients	CAS No.	% by Weight	PEL/TLV
Pendimethalin	40487-42-1	0.75 – 0.86	3 mg/M <sup>3</sup>
Inert Ingredients		99.25 – 99.14	

### SECTION 3

### HAZARDS IDENTIFICATION

#### CAUTION: KEEP OUT OF REACH OF CHILDREN

This product is a light yellow to brown-colored granule with nutty odor. Primary routes of entry are inhalation, ingestion, eye contact and skin contact.

### SECTION 4

### FIRST AID MEASURES

**EYES:** Hold eye 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. Call a poison control center or doctor for treatment advice.

**SKIN:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 – 20 minutes. Call a poison control center or doctor for treatment advice.

**INGESTION:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

**INHALATION:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration preferably by mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

**NOTICE TO MEDICAL DOCTOR:** Pendimethalin is a strongly orange-red colored compound – virtually an aniline dye. Cases have been described of orange-yellow coloration of urine following heavy exposure of workers to the dust of pendimethalin. Despite its structure as both a nitro-compound and aromatic amine, exposure to pendimethalin is NOT associated with methhemoglobinemia. Treat symptomatically.

## SECTION 5

## FIRE FIGHTING MEASURES

**FLASH POINT (Method):** Not Applicable  
**FLAMMABLE LIMITS (LEL & UEL):** Not Applicable  
**EXTINGUISHING MEDIA:** Dry chemical, CO<sub>2</sub>, foam, water spray or fog.  
**EXPLOSION HAZARDS:** Organic dusts may form an explosive dust/air mixture. Combination with strong acids may create an explosion hazard.  
**FIRE FIGHTING PROCEDURES:** Firefighters should be equipped with self-contained breathing apparatus and turnout gear. Avoid breathing dusts, vapors and fumes from burning materials. Control run-off water. If water enters a drainage system, advise authorities downstream. Fertilizer will become slippery when wet. Guard against falls.  
**HAZARDOUS COMBUSTION PRODUCT:** At high temperatures, nitrogen-containing fertilizer can form cyanuric acid, hydrogen cyanide and ammonia. Ammonium carbamate may also be formed.

## SECTION 6

## ACCIDENTAL RELEASE MEASURES

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:** If material is spilled, evacuate area and ventilate. Wear protective equipment. If dry, sweep or shovel into a container for reuse per label instructions, or disposal. If liquid, contain spill and absorb with inert material and place in container for disposal. Prevent run-off from entering drains, sewers or water sources. Avoid contact with skin, eyes, and clothing.

## SECTION 7

## HANDLING AND STORAGE

**HANDLING:** Store in original container a cool, dry secured storage area. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Avoid contact with eyes, skin or clothing. Keep away from heat, sparks, or other ignition sources.

**OTHER PRECAUTIONS:** Avoid inhalation of dust. Wash thoroughly with soap and water after handling. Keep out of reach of children.

## SECTION 8

## EXPOSURE CONTROL/PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Work in well ventilated areas. Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.

**RESPIRATORY PROTECTION:** If vapors or dusts exceed acceptable levels, wear a MSHA/NIOSH approved pesticide respirator.

**EYE PROTECTION:** Chemical goggles when respirator does not provide eye protection.

**SKIN PROTECTION:** Wear protective clothing: long-sleeved shirts and pants, shoes plus socks. Wear chemical-resistant gloves.

**WORKER HYGENIC PRACTICES:**

After using product, remove clothing and launder separately before reuse. Promptly and thoroughly wash hands and exposed skin with soap and water. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

**GENERAL COMMENTS:**

Facilities storing or utilizing this material should be equipped with an eyewash facility.

**SECTION 9****PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE AND ODOR:** Light yellow to brown granules with nutty odor.

**SPECIFIC GRAVITY:** Not Applicable

**VAPOR PRESSURE:** Not Applicable

**BOILING POINT:** Not Applicable

**PERCENT VOLATILE:** Not Applicable

**EVAPORATION RATE:** Not Applicable

**SOLUBILITY IN WATER:** Not Soluble

**VAPOR DENSITY:** Not Applicable

**MELTING POINT:** Not Applicable

**pH:** Not Applicable

**BULK DENSITY:** 45 – 65 lbs./cu ft.

**SECTION 10****STABILITY AND REACTIVITY**

**STABILITY:**

Stable

**CONDITIONS TO AVOID:**

None

**INCOMPATIBLE MATERIALS:**

Strong oxidizers or strong alkalis

**HAZARDOUS DECOMPOSITION PRODUCTS:**

Possible combustion products include oxides of carbon, sulfur and nitrogen. Urea also decomposes to biuret and cyanuric acid. Urea reacts with sodium or calcium hypochlorite to form explosive nitrogen trichloride.

**HAZARDOUS POLYMERIZATION:**

Not known to occur.

**SECTION 11****TOXICOLOGICAL INFORMATION**

**ACUTE DERMAL LC<sub>50</sub>:** >5,000 mg/kg

**EYE EFFECTS:** Slightly to moderately irritating

**INHALATION:** May cause respiratory tract irritation

**CARCINOGENIC POTENTIAL: OSHA:** Not listed

**NTP:** Pendimethalin -- reasonably anticipated to be a human carcinogen

**IARC:** Ethylene dichloride – Group 2 B (possibly carcinogenic to humans)

**ACUTE ORAL LD<sub>50</sub>:** 4665 to 5,000 mg/kg

**SKIN EFFECTS:** Not irritating

**INGESTION:** May cause stomach distress, nausea or vomiting

**SECTION 12****ECOLOGICAL INFORMATION**

**ENVIRONMENTAL DATA:** This product is toxic to fish. Do not apply to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift or runoff from treated turf may adversely affect aquatic organisms in adjacent aquatic sites. Do not contaminate water when disposing of equipment washwaters or rinsate.

**SECTION 13****DISPOSAL CONSIDERATIONS**

**PRODUCT DISPOSAL:** Waste resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state or local procedures. Never place unused product down any indoor or outdoor drain.

**CONTAINER DISPOSAL:** Do not reuse bag. Completely empty bag into application equipment. Dispose of emptied bag(s) in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**SECTION 14****TRANSPORT INFORMATION**

**DOT SHIPPING DESCRIPTION:** Not regulated  
**U.S. SURFACE FREIGHT CLASSIFICATION:** Fertilizing compounds, NOI; Dry (NMFC 68140, Sub 5; Class 50)  
**REPORTABLE QUANTITY (RQ lbs):** Ethylene dichloride – 100

**SECTION 15****REGULATORY INFORMATION****SARA TITLE III****SEC 311/312:**

- N Immediate (Acute Health)
- N Delayed (Chronic Health)
- N Fire
- N Sudden Release of Pressure
- N Reactivity

**SEC 302:** Not Applicable  
**SEC 304:** Not Applicable  
**SEC 313:** Pendimethalin (40487-42-1)  
 Ethylene dichloride (107-06-2)  
**CERCLA RQ:** 107-06-2 – 100 lbs.  
**CAA RQ:** Not Applicable

**National Fire Protection Association (NFPA) Ratings:**

**Health:** 2      **Fire:** 1      **Reactivity:** 0      **Specific:** none

**SECTION 16****OTHER INFORMATION**

**Issue Date:** 10 OCT 2005  
**Supersedes MSDS Dated:** 1 AUG 2001

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