

Material Safety Data Sheet

SPUD GUARD 2 EC

Revision Date: January 9, 2011

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Spud Guard
Chemical Name: Chlorpropham * (Isopropyl N-[3-chlorophenyl] carbamate)
Synonyms: Isopropyl-m-chlorocarbamate
General Use: Potato sprout inhibition
EPA Registration Number: 72790-2-65726

Company Identification:

Pin Nip, Division of
1,4GROUP Inc.
P.O. Box 860
Meridian, ID 83680-0860

24-Hour Emergency Telephone Number

Call PERS 1-800-633-8253

2. COMPOSITION/INFORMATION ON INGREDIENTS

| | |
|--|---------|
| Chlorpropham* (Isopropyl N-[3-chlorophenyl] carbamate) (CAS No. 101-21-3)..... | 24.65% |
| OTHER INGREDIENTS:..... | 74.35% |
| TOTAL..... | 100.00% |

*Contains 2 pounds active ingredient per gallon.

3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Colorless, flammable liquid with alcoholic odor. Can cause eye and skin irritation. Harmful if swallowed, inhaled or absorbed through skin. Avoid contact with skin, eyes or clothing, Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling. This product may cause allergic skin reaction. Remove contaminated clothing and wash clothing before reuse.

POTENTIAL HEALTH EFFECTS

POTENTIAL ROUTES OF ENTRY: Inhalation; Skin contact; Eye contact, Ingestion

SYMPTOMS OF OVEREXPOSURE

Inhalation: Inhalation may cause nose, throat and respiratory tract irritation.

Skin Contact: Skin contact may result in skin irritation. Repeated dermal exposure could result in adverse effects on the blood, liver, bone marrow and spleen.

Eye Contact: May cause eye irritation.

Ingestion: Ingestion of this product may cause gastro-intestinal irritation, nausea, or other symptoms of toxicity.

Carcinogenicity: None of the components in this product are listed by IARC, NTP, or OSHA as a potential carcinogen.

4. FIRST AID MEASURES

If **Swallowed**: Immediately call a poison control center or doctor. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

If **Inhaled**: Remove victim to fresh air. If not breathing, call 911 then give artificial respiration, preferably mouth to mouth. Get medical attention.

If in **Eyes**: Hold eyelids open and flush with a gentle stream of water for 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Get medical attention.

If on **Skin**: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Wash with plenty of soap and water. If irritation persists, get medical attention.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

Flash Point: >235° F

Extinguishing Media: Water. Wear protective clothing. Dike to prevent any material from entering drains or sewers or contaminating the environment. Evacuate people downwind from the fire. Wear self contained breathing apparatus. Fumes and or vapors may be toxic if inhaled or contacted by the skin.

Fire Fighting Procedures: Prevent human exposure to fire, smoke, vapors and products of combustion. Firefighters should wear full-face, self-contained breathing apparatus and impervious protective clothing. If possible, move containers from fire area. Keep non-leaking containers cool with water, fog or spray to prevent rupture from excessive heat. Dike fire water for later disposal. Do not allow contaminated water to enter waterways.

Hazardous Decomposition Products: Product can decompose under fire conditions to form highly toxic and corrosive gases.

6. ACCIDENTAL RELEASE MEASURES

For spill, leak, fire, exposure, or accident call **PERS 1-800-633-8253**.

Clean-up: Soak up using an absorbent and dispose of absorbent in accordance with federal, state, and local regulations. Wash spill area with detergent/water. Dike wash water for proper disposal. Observe all local, state and federal laws and regulations regarding disposal, spill, cleanup, removal and discharge.

7. HANDLING AND STORAGE

Precautions apply to emptied containers.

Handling: Keep containers closed when not in use. Use only approved equipment for transporting containers to avoid puncturing or rupturing. Wear appropriate protective equipment (see Section 8) when working with this product. During application procedure wear designated protective equipment to avoid inhalation, skin or eye contact.

Storage: Do not contaminate water, food, or feed by storage or disposal. Store containers in a cool, dry, well-ventilated area away from flammable, combustible or incompatible material such as strong oxidizers, strong bases and sources of heat or flame. Do not heat or cut empty container with a cutting torch. Avoid storage below freezing temperatures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Skin Protection Requirements: Skin contact with liquid or aerosol spray should be prevented by the use of impervious clothing and footwear, selected with regard to use conditions and exposure potential. Applicators and other handlers must wear chemical resistant gloves. Following application, workers (e.g. baggers) must wear chemical resistant gloves while potatoes are wet. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

Engineering Controls: This material, when aerosolized, is required to be handled under specific process conditions according to the EPA-registered product label instructions. Local exhaust ventilation may be needed to control emissions for some operations.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|----------------|---|
| Physical State | Liquid |
| Color | Colorless |
| Odor | Alcoholic |
| Density | 1.03 g/mL |
| pH | 8.10 @ 25°C |
| Viscosity | 98.81 mm ² /s @ 20°C and 35.07 mm ² /s @ 40.0°C |
| Flash Point | >235° F |

10. STABILITY AND REACTIVITY

Stability: Stable under most conditions, but avoid acid and alkali products, excessive heat; ignition sources.

Hazardous Polymerization: Does not occur.

Incompatibilities: (Avoid contact with): Strong oxidizers, acids, alkalis (bases).

Hazardous Decomposition Products: Chloroaniline, isocyanates, oxides of nitrogen, carbon monoxide and carbon dioxide.

11. DISPOSAL CONSIDERATIONS

Waste Disposal: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of federal and state law. If these wastes cannot be disposed of by application according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Section of the nearest EPA Regional Office for guidance. Do not allow waste to enter sewers or surface waters.

Container Disposal: *5 Gallons:* Nonrefillable container. Do not reuse or refill this container. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allows by state and local authorities by burning. If burned, stay out of smoke. *30 Gallons:* Nonrefillable container. Do not reuse or refill this container. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allows by state and local authorities, by burning. If burned, stay out of smoke.

12. TRANSPORTATION INFORMATION

DOT Proper Shipping Name.....Not Restricted

13. OTHER INFORMATION

PREPARED FOR: Pin/Nip, a division of 1,4GROUP, Inc.

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ISSUE DATE: September 16, 2011

Revision Dates – September 16, 2011, January 9, 2012