



SAFETY DATA SHEET

I. IDENTIFICATION

Product Identifier(s): SPUD GUARD 2 EC

Other Means of Identification: Registration No. 32501 Pest Control Products Act
US EPA Registration No. 72790-2

Substance: Chlorpropham 24.65%
CAS No.: 101-21-3
EC No.: 202-925-7

Recommended Use: Potato sprout inhibitor. Emulsifiable Concentrate.
Restrictions on Use: COMMERCIAL.

Manufacturer/Supplier: Pin/Nip, a division of 1,4GROUP, Inc.
2307 East Commercial St.
Meridian, ID 83642

Telephone Number: 1-208-887-9766

Emergency Telephone Number: 1-208-887-9766 (1,4GROUP, Inc.)
Transportation Emergency: 1-800-633-8253 (PERS)

2. HAZARD(S) IDENTIFICATION

GHS Classification: (US & CANADA) **NOT APPLICABLE. REGISTERED PESTICIDE.** See Sections 15 and 16.

Label Elements: **READ THE LABEL BEFORE USING. KEEP OUT OF REACH OF CHILDREN.**

Hazards: **HAZARDS TO HUMANS AND DOMESTIC ANIMALS.**
Harmful if absorbed through skin, inhaled or swallowed. Avoid contact with eyes, skin and clothing. Avoid inhalation of spray.

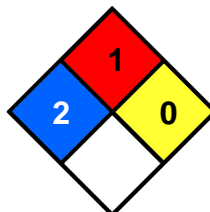
Precautions: **NOTICE TO USER:** This product is to be used only in accordance with the directions on the label. It is an offence to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

GHS Hazards: (US & Canada) May cause damage to organs through prolonged or repeated exposure. Causes eye irritation. See Section 16.

Ingredients with unknown toxicity: Not applicable.

HMIS & NFPA:

HEALTH	* 2
FLAMMABILITY	1
PHYSICAL HAZARD	0
PPE	F



Legend	
Extreme Danger	4
Serious	3
Moderate	2
Slight	1
Minimal	0
Chronic	*

3. COMPOSITION/INFORMATION ON INGREDIENTS

Name	CAS number	EC number	Weight %
Chlorpropham	101-21-3	202-925-7	24.65%



4. FIRST-AID MEASURES

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or ambulance, then give artificial respiration. Call a poison control center or doctor for treatment advice. Take container, label or product name and Registration Number with you when seeking medical attention.

IF ON SKIN OR CLOTHING: Remove contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

IF IN 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 eye. Call a poison control center or doctor for treatment advice.

IF SWALLOWED: 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. Take container, label or product name and Registration Number with you when seeking medical attention.

MOST IMPORTANT SYMPTOMS & EFFECTS: (ACUTE OR DELAYED) Causes eye irritation. Overexposure to chlorpropham may result in methemoglobinemia.

Immediate medical attention and special treatment: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Dry chemical, appropriate foam, water fog, or carbon dioxide.

Unsuitable Extinguishing Media: None known.

Flash Point: >112°C (235°F)

LEL: Not available.

UEL: Not available.

Specific Fire and Explosion Hazards: Not flammable by WHMIS/OSHA criteria. Keep away from heat, flames, and sparks.

Hazardous Combustion Products: Oxides of carbon, nitrogen oxides, hydrogen chloride gas.

Special protective equipment and precautions for fire-fighters: Prevent human exposure to smoke, vapours and products of combustion. Fire-fighters should wear full protective gear with self-contained breathing apparatus (SCBA). Move containers from fire area if you can do it without risk. Keep containers cool with water fog or spray to prevent rupture from excessive heat. Dike fire-control water for later disposal; do not scatter the material. Prevent entry into waterways or sewers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: See product label. Before attempting clean-up, refer to Section 8 personal protection. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for cleanup of spills.

Methods for clean up: See product label. Evacuate unprotected and untrained personnel from the area. The spill should be handled by qualified personnel only. Remove all sources of ignition. Ventilate the area. Contain spill. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Cover spill with a non-combustible material such as vermiculite or other commercially available inorganic absorbent. Cover spill with absorbent until it appears dry. Collect the spilled



material using spark proof tools and clean up the area. Place waste materials in a closed container suitable for disposal. Dike wash water for proper disposal. Observe all local, state and federal laws and regulations regarding disposal, spill, cleanup, removal and discharge.

Waste Disposal: See product label. Do not allow waste to enter sewers or surface waters. Refer to Section 13 for disposal considerations.

Container Disposal: See product label. Make the empty container unsuitable for further use. Dispose of the container in accordance with the provincial requirements. For information on disposal of unused or unwanted product, contact the manufacturer or the provincial regulatory agency.

7. HANDLING AND STORAGE

Precautions for safe handling: KEEP OUT OF REACH OF CHILDREN. Post warnings and restrict access to area. Follow all instructions on the label. Wear appropriate protective equipment (see Section 8). Avoid contact with eyes, skin, and clothing. Avoid inhalation of spray. Do not eat, drink, or smoke in work areas. Remove contaminated clothing and discard or wash before reuse.

Conditions for safe storage: KEEP OUT OF REACH OF CHILDREN. Follow all instructions on the label. Store away from food and animal feed. Keep container tightly closed when not in use. Store in a cool, dry, well-ventilated area away from heat, flames, combustible and incompatible materials. Post warnings and restrict access to storage area to authorized personnel. Comply with all applicable regulations.

Incompatible materials: Strong oxidizers, acids, and bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits: Occupational exposure limits have not been established.

Engineering Controls: Installation of a shield around the conveyor belt is required to prevent spray mist from drifting.

Individual protection measures: Follow all instructions on the label.

Respiratory Protection: Use a NIOSH-approved organic vapor acid gas respirator (OVAG) with mist and fume filter to reduce potential for inhalation exposure when use conditions generate vapor, mist or aerosol. When exposure potential requires a higher level of protection, for example, when workers enter storage or treatment areas during or following application, or in emergency conditions, use a NIOSH-approved, positive-pressure, pressure demand air-supplied respirator and wear appropriate protective clothing. Respirator cartridges or canisters must be changed frequently to assure that breakthrough exposure does not occur. Observe OSHA regulations for respirator use (29 CFR 1910.134).

Skin Protection: Skin contact with liquid or aerosol spray must be prevented by the use of impervious clothing, chemical resistant gloves and footwear, each selected with regard to use conditions and exposure potential.

Eye/Face Protection: Wear safety glasses with side shields, splash goggles or face shield. Contact lenses should not be worn.



9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid	Colour; Odour: Amber; Sweet vegetable oil
pH @ 20°C: Not available	Flash Point (°C/°F): >112°C (235°F)
Vapour Density (Air = 1): Not available	Autoignition Temperature (°C/°F): Not available
Decomposition Temperature: Not available	Evaporation Rate (Ether =1): Not available
Viscosity @ 25°C (77°F): Not available	Upper & Lower Explosive Limits: Not available
Solubility in Water @ 25°C (77°F): Not available	Flammability (solid; gas): Not determined
Vapour Pressure: Not available	Melting Point/Freezing Point: Not available
Boiling Point: Not available	Relative Density (water =1): 0.969 g/mL
Odour Threshold (ppm): Not available	Partition Coefficient n-octanol/water: Not available

10. STABILITY AND REACTIVITY

Chemical Stability:	Stable under normal conditions of use and storage.
Reactivity:	May react with strong oxidizing agents.
Possibility of hazardous reactions:	Hazardous polymerization is not expected to occur.
Incompatible materials:	Acids, bases and strong oxidizers.
Hazardous decomposition products:	Oxides of carbon, nitrogen oxides, hydrogen chloride gas.
Conditions to avoid:	Excessive heat, flames, sparks, and all other sources of ignition.

11. TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure.

HEALTH EFFECTS:

Eyes:	Causes irritation. Symptoms include pain, tearing, redness, or swelling.
Skin:	Harmful if absorbed through skin. See target organ effects.
Inhalation:	Harmful if inhaled. See target organ effects.
Ingestion:	Harmful if swallowed. Symptoms include loss of coordination and respiratory depression. See target organ effects.

Target Organ Toxicity: May cause damage to organs through prolonged or repeated exposure. Overexposure may affect the blood, spleen, liver, and bone marrow. Overexposure to chlorpropham may result in methemoglobinemia.

TOXICITY DATA:

Oral LD ₅₀ , rats:	3707 mg/kg
Dermal LD ₅₀ , rabbits:	>2000 mg/kg
Inhalation LC ₅₀ :	Not data available
Eye Irritation:	Non-irritant based on the results of an acute eye irritation test in rabbits.
Skin Irritation:	No signs of irritation or corrosivity in an acute dermal irritation test in rabbits.
Skin Sensitization:	Negative
Respiratory Sensitization:	No data available



Subchronic Feeding Study: Conducted in rats which were fed chlorpropham for 90 days. At higher dose levels, adverse effects on the liver, blood forming systems, ie., bone marrow and spleen, were observed. At the highest dose level, some animals had elevated cholesterol. A NOEL was not identified.

Subchronic Feeding Study: Conducted on mice which were fed chlorpropham for 90 days. The NOEL was 420 mg/kg/day. At the LOEL (lowest observable effect level), 856 mg/kg/day, adverse effects were observed in the blood, liver, spleen and bone marrow.

Chronic Feeding Study: Conducted on beagle dogs for 60 weeks. Thyroid changes occurred at the LOEL (50 mg/kg/day). Effects on the blood were also seen. The NOEL was 5 mg/kg/day.

Germ Cell Mutagenicity: This testing gave mixed results.

Teratogenicity: No teratologic changes were observed in rats or rabbits.

Reproductive Effects: Chlorpropham did not affect fertility or reproduction in a multi-generation reproduction study.

Carcinogenicity: Chlorpropham does not cause cancer in animals based on results of long term feeding studies conducted in rats and mice.

IARC: IARC Group 3 - Not classifiable as to its carcinogenicity to humans.
OSHA: Not regulated as a carcinogen.
ACGIH: Not listed as a carcinogen.

12. ECOLOGICAL INFORMATION

Ecological Toxicity

Oral LD₅₀ (Mallard): >2000 mg/kg
Dietary LC₅₀ (Bobwhite): >5620 ppm
LC₅₀ (Bluegill): 6.8 mg/L
LC₅₀ (Rainbow Trout): 5.7 mg/L
EC₅₀ (Daphnia magna): 3.7 mg/L

Persistence and degradability: Readily biodegradable in soil and water.

Bioaccumulative potential: Will not bioconcentrate in aquatic organisms.

Mobility in soil: Strongly adsorbs to clay and soil and shows low mobility.

Results of PBT and vPvB: Chlorpropham is not a PBT or vPvB substance.

Other adverse effects: None known.

13. DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose of residual product and empty container in accordance with label instructions. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal and State Law. If 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. Chlorpropham as sold, is not a hazardous waste under federal Resource Conservation and Recovery Act (RCRA) regulations. Pesticide wastes are considered toxic.



14. TRANSPORT INFORMATION

U.S. Department of Transportation: Considered hazardous, but accepted in non-bulk quantities by ground according to DOT Title 49 regulations.

UN proper shipping name: ADR/RID (Road/Rail)/IMDG (Sea)/ICAO-TI/IATA-/DGR (Air)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Chlorpropham)

UN No: 3082

Class: 9

Packing group: III

Marine pollutant: Yes

15. REGULATORY INFORMATION

US Federal Regulations:

FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT: US EPA Reg No. 72790-2.

This chemical is a pesticide product registered by the United States Environmental Protection Agency (EPA) and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels.

OSHA: Exempt. This SDS has been prepared in accordance with the OSHA Hazard Communication Standard 29 CFR 1910.1200 (HCS 2012) and contains all of the information required. Chlorpropham is considered hazardous under the criteria of the HCS 2012 based on irritation potential and target organ effects. Section 1910.1200(b)(5) does not require labeling of any pesticide as defined in the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), when subject to the labeling requirements of that Act and labeling regulations issued under that Act by the US EPA. See Section 16.

TSCA Status: Not on TSCA Inventory; it is sold as an EPA-registered pesticide.

CERCLA -Hazardous Substances – Reportable Quantities: Not listed.

SARA Title III, Sections 311/312 - Hazard Categories: Fire; Immediate Health; delayed health

SARA TITLE III, Section 313: Not reportable

California Proposition 65: Not listed

Canada Federal Regulations:

PEST CONTROL PRODUCTS ACT: REGISTRATION NO. 32501. Registered pest control products are exempt from the Hazardous Products Act (HPA) Part II – Hazard classification and supplier SDS and labelling requirements. Part II does not apply in respect of the sale or importation of anything listed in Schedule 1 including any pest control product as defined in subsection 2(1) of the Pest Control Products Act (PCPA), when subject to the labelling requirements of that Act and labelling regulations issued under the Act by the Pest Management Regulatory Agency (PMRA).

WHMIS: Exempt. This SDS has been prepared in accordance with the Hazardous Products Regulations (HPR) and contains all of the information required. Chlorpropham is considered hazardous under the criteria of the HPR based on irritation potential and target organ effects. See Section 16.

16. OTHER INFORMATION

GHS Classification (US & CANADA):

Specific Target Organ Toxicity (Repeated Exposure) Category 2; Eye Irritation Category 2B



Signal word:

WARNING

Hazard statements:

MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE. CAUSES EYE IRRITATION.

Precautionary statements:

Do not breathe fumes, gas, mist, vapors or spray. Wash exposed areas thoroughly after handling. Obtain medical attention if you feel unwell.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists obtain medical attention. Dispose of contents in accordance with applicable regulations.

Date of Preparation:

15 Jan 2017

Disclaimer:

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