

PIN NIP® TECHNICAL CHLORPORPHAM AND PIN NIP® 98% CHLORPROPHAM  
SAFETY DATA SHEET

Complies with  
OSHA Hazard Communication Standard 29 CFR 1910.1200

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

1.1 Product Label Name: PIN NIP® Technical Chlorpropham and  
PIN NIP® 98% Chlorpropham  
Substance: Chlorpropham  
CAS No.: 101-21-3  
EC No.: 202-925-7

1.2 Use of the substance: Potato sprout inhibitor

1.3 Details of the supplier of the Safety Data Sheet

Company Identification: Pin/Nip, a division of 1,4GROUP, Inc.  
PO Box 860  
Meridian, ID 83680-0860  
Telephone No. 1-208-887-9766

1.4 Emergency telephone: Transportation: 1-800-633-8253 (PERS)  
Other Emergencies: 208-887-9766 (1,4GROUP, Inc.)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance

2.1.1 Classification according to GHS guidance and 29 CFR 1910.1200 Appendix A and B  
Eye Irritation 2B

2.2 Label elements

2.2.1 Labelling according to US 29 CFR 1910.1200 and GHS

Hazard Pictograms: None

Signal word: Warning

Hazard statements: Causes eye irritation

Precautionary statements: Prevention:  
Wash exposed areas thoroughly after handling

Response:  
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: Get medical attention.

2.3 Unclassified hazards: None known

2.4 Percentage of ingredients with unknown toxicity: 0%

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

Name	CAS number	EC number	Weight %
Chlorporpham	101-21-3	202-925-7	98%

### 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

Inhalation: 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.

Skin Contact: Remove contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Eye Contact: Hold eye open and rinse slowly and gently with water for at least 15 minutes. Remove contact lenses, if present, after the first 15 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Swallowed: Call a poison control center or doctor immediately for treatment advice. Have a 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.

4.2 Most important symptoms and effects, both acute and delayed Causes eye irritation.

4.3 Immediate medical attention required: Symptomatic treatment is advised. There are no medical conditions that are known to be aggravated by exposure to this product. No immediate medical attention required if exposed.

### 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media: Use dry chemical, appropriate foam, water fog, carbon dioxide or other extinguishing agent.

5.2 Special hazards arising from substance: None known

5.3 Advice for firefighters: 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 contamination of waterways.

NFPA Hazard Rating

H = 1

F = 0

R = 0

O = None

HMIS Hazard Rating

H = 1

F = 0

R = 0

PP = F

H = Health; F = Flammability; R = Reactivity; O = Other Hazard;  
PP = Personal Protective Equipment

## 6. ACCIDENTAL RELEASE MEASURES

6.1 Methods for clean up: Sweep up spilled material and place in a labeled chemical waste container with lid. 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.

6.2 Waste Disposal: Chlorporpham as sold, is not a hazardous waste under federal Resource Conservation and Recovery Act (RCRA) regulations. Pesticide wastes are considered toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of federal and state Law. If such wastes cannot be disposed of according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Section of the nearest EPA Regional Office, or other appropriate regulatory authority, for guidance. Do not allow waste to enter sewers or surface waters.

6.3 Container Disposal: Do not reuse empty container. Triple rinse (or equivalent), then offer for recycling, or puncture and dispose of in a sanitary landfill, or by other procedures approved by local and state authorities.

## 7. HANDLING AND STORAGE

7.1 Precautions for safe handling: Keep containers closed when not in use. Avoid contact with skin or eyes. Avoid breathing dust or vapor. Wear appropriate protective equipment (see Section 8) when

working with this product. Observe all instructions on label.

7.2 Conditions for safe storage: Store away from foodstuffs and animal feed. 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. Keep containers tightly closed when not in use. Post warnings and restrict access to storage area. Precautions apply to emptied containers. Comply with all applicable regulations for storage, handling and application. Do not heat or cut empty container with a cutting torch. Keep product away from children.

7.3 Specific end use: Potato sprout inhibitor applied to potatoes in storage

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure limits: Occupational exposure limits have not been established

8.2 Exposure controls:

8.2.1 Respiratory: Use a NIOSH-approved organic vapor acid gas respirator (OVAG) with dust, mist and fume filter to reduce potential for inhalation exposure when use conditions generate dust, 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, that is, before the aerosol fog has settled 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).

8.2.2 Skin Protection: Skin contact with solid, 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.

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

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

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid at 20°C
Color	Brown; light grayish, yellowish
Odor	Halide; Unsaturated
Odor threshold:	Not available
Boiling Point	251-256°C (484-493°F)
Melting Point	38 - 41°C (100 -106°F)
Solubility	89 mg/L in water at 25°C; Soluble in ketones and lower alcohols
pH	5.8 at 20°C
Bulk Density	0.994 g/ml
Vapor Pressure	$2.4 \times 10^{-2}$ Pa (20°C)
Octanol/Water Partition Coefficient	Log Pow = 3.47
Flash Point:	Not applicable - solid
Flash point Method:	Not Applicable
Flammable Limits in Air	Not Determined
Autoignition Temperature:	Not Determined
Evaporation Rate:	Not Determined
Vapor Density:	Not Determined
Specific Gravity:	Not Determined
Decomposition Temperature:	Not Determined
Viscosity:	Not Determined

## 10. STABILITY AND REACTIVITY

- 10.1 Stability: Considered stable below 100 °C (212° F). Stable at 55°C for 14 days. Stable to sunlight and toward aluminum, iron and tin to 150°C.
- 10.2 Reactivity: Hydrolyzes slowly in acidic or alkaline media. In 0.5 N sodium hydroxide solution hydrolyzes slowly.
- 10.3 Possibility of hazardous reactions: Hazardous polymerization is not expected to occur.
- 10.4 Incompatible materials: Avoid acids, bases and strong oxidizers.
- 10.5 Hazardous decomposition products Carbon monoxide, carbon dioxide, nitrogen oxides.
- 10.6 Conditions to avoid: Avoid excessive heat.

## 11. TOXICOLOGICAL INFORMATION

11.1 Chlorporpham technical has low acute toxicity.

Oral LD <sub>50</sub> , rats:	2030 mg/kg
Dermal LD <sub>50</sub> , rabbits:	>2000 mg/kg
Eye Irritation:	Mild Irritant
Skin Irritation:	Mild Irritant

Skin Sensitization:	Negative
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.  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.
Mutagenicity:	This testing gave mixed results.
Teratogenicity:	No teratologic changes were observed in rats or rabbits.
Reproductive Toxicity:	Chlorpropham did not affect fertility or reproduction in a multi-generation reproduction study.
Carcinogenicity:	Chlorpropham does not cause cancer in animals base on results of long-term feeding studies conducted in rats and mice.
IARC:	Not listed as a carcinogen.
OSHA:	Not regulated as a carcinogen.
ACGIH:	Not listed as a carcinogen
Target Organs:	Overexposure to chlorpropham may affect the blood, spleen, liver, and bone marrow.

## 12. ECOLOGICAL INFORMATION

### 12.1 Ecological Toxicity

Oral LD <sub>50</sub> (Mallard)	>2000 mg/kg
Dietary LC <sub>50</sub> (Bobwhite)	>5620 ppm
LC <sub>50</sub> (Bluegill)	6.8 mg/L
LC <sub>50</sub> (Rainbow Trout)	5.7 mg/L
LE <sub>50</sub> (Daphnia magna)	3.7 mg/L

12.2 Persistence and degradability: Readily biodegradable in soil and water

12.3 Bioaccumulative potential: Will not bioconcentrate in aquatic organisms

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

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

12.6 Other adverse effects: None known

### 13. DISPOSAL CONSIDERATIONS

13.1 Waste Disposal Method: 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.

### 14. TRANSPORTATION INFORMATION

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

United Nations No: 3077

UN proper shipping name: ADR/RID (Road/Rail)/IMDG (Sea)/ICAO-TI/IATA-/DGR (Air) Environmentally hazardous substance, solid, N.O.S. (Chlorpropham)

Transport hazard class: 9

Packing group: III

Marine pollutant: Yes

### 15. REGULATORY INFORMATION

OSHA Status: Chlorpropham is considered hazardous under the criteria of the Federal OSHA Hazard Communication standard, 29 CFR 1910.1200, based on irritation potential and target organ effects.

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

CERCLA: Not listed; no reportable quantity ("RQ")

SARA Title III, Sections 311/312

Hazard Categories: Immediate Health; delayed health

SARA TITLE III, Section 313: Not reportable

California Proposition 65: Not listed

## 16. OTHER INFORMATION

### 16.1 Disclaimer

The information contained on the Safety Data Sheet has been compiled from data considered accurate. These data are believed to be reliable, however, it must be pointed out that values for certain properties are known to vary from source to source. The One Four Group disclaims any warranty expressed or implied as well as any liability for any injury or loss arising from the use of this information or the materials described. These data are not to be construed as absolutely complete since additional data may be desirable when particular conditions or circumstances exist. It is the responsibility of the user to determine the best precautions necessary for the safe handling and use of this product for your application. These data relate only to the specific material designated and not to be used in combination with any other material. Many federal and state regulations pertain directly or indirectly to the product's end use and disposal of containers and unused material. It is the purchaser's responsibility to familiarize themselves with all applicable regulations. Users assume all risks of their use, handling and disposal of the product, or from the publication, or use of, or reliance upon information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other manner.

16.2 Date of preparation: June 17, 2015

16.2 Revision date: July 31, 2015, March 31, 2016

16.3 Prepared for: Pin/Nip, a division of 1,4GROUP, Inc.