



# SAFETY DATA SHEET

Issuing Date 06-Jul-2009

Revision Date 01-Feb-2018

Revision Number 3

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product Identifier

Product Name **SHIELD E.C.**

### Other means of identification

**Product Code** 2150800  
**CAS Number** 101-21-3  
**Formula** Mixture  
**Synonyms** Shield Potato Spout Inhibitor containing Chlorophropham  
**EPA Registration Number** 2749-70

### Recommended use of the chemical and restrictions on use

**Recommended Use** Agriculture  
**Uses advised against** Avoid contact with food. Avoid prolonged contact with eyes, skin, and clothing.

### Details of the supplier of the safety data sheet

**Supplier Address** ACETO AGRICULTURAL CHEMICALS CORPORATION  
4 Tri Harbor Court  
Port Washington, NY 11050-4661  
Phone: (516) 627-6000  
Fax: (516) 627-6093  
Email: aceto@aceto.com

### Emergency Telephone Number(s)

ChemTrec: 1-800-424-9300 Outside of the United States: 1-703-527-3887

## 2. HAZARDS IDENTIFICATION

### Classification

Acute toxicity - Oral	Category 4
Skin Corrosion/Irritation	Category 2
Serious eye damage/eye irritation	Category 2B
Carcinogenicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 2

### Label elements

#### Emergency Overview

**Signal Word****Warning****Hazard statements**

Harmful if swallowed  
 Causes skin irritation  
 Causes eye irritation  
 Suspected of causing cancer  
 May cause damage to organs through prolonged or repeated exposure  
 Toxic to aquatic life with long lasting effects

**Appearance**

Clear Amber

**Physical State**

Liquid

**Odor**

No information available

**Precautionary Statements - Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Use personal protective equipment as required  
 Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Do not breathe dust/fume/gas/mist/vapors/spray

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention  
 Specific treatment (see supplemental first aid instructions on this label)  
 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 advice/attention  
 IF ON SKIN: Wash with plenty of soap and water  
 If skin irritation occurs: Get medical advice/attention  
 Take off contaminated clothing and wash before reuse  
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
 Rinse mouth

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

None known

**Other Information****3. COMPOSITION/INFORMATION ON INGREDIENTS****Synonyms**

Shield Potato Spout Inhibitor containing Chlorophropham

**Formula** Mixture

Chemical Name	CAS No	Weight-%	North American Hazard Indicator
Chlorpropham	101-21-3	36	Supplement 7 [1987]; Monograph 12 [1976]
Other Ingredients	N/A	64	False

#### 4. FIRST AID MEASURES

##### First Aid Measures

<b>General Advice</b>	Show this safety data sheet to the doctor in attendance.
<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician or poison control center immediately.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Call a physician or poison control center immediately.
<b>Inhalation</b>	Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Call a physician or poison control center immediately.
<b>Ingestion</b>	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.
<b>Self-Protection of the First Aider</b>	Use personal protective equipment as required. Avoid contact with eyes, skin and clothing.

##### Most important symptoms and effects, both acute and delayed

**Signs and Symptoms** No information available.

##### Indication of any immediate medical attention and special treatment needed

**Notes to Physician** Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

<b><u>Suitable Extinguishing Media</u></b>	Water spray. Carbon dioxide (CO2). Dry powder. Foam.
<b><u>Unsuitable Extinguishing Media</u></b>	No information available.
<b><u>Hazardous Combustion Products</u></b>	Thermal decomposition or combustion may produce hazardous gases and/or materials.
<b><u>Explosion Data</u></b>	Not available
<b>Sensitivity to mechanical impact</b>	Not available.
<b>Sensitivity to static discharge</b>	Not available.

##### Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapours.

##### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions** Evacuate personnel to safe areas. Use personal protective equipment as required. Avoid contact with eyes, skin and clothing. In case of insufficient ventilation, wear suitable respiratory equipment.

**Environmental Precautions** Local authorities should be advised if significant spillages cannot be contained. Do not allow into any sewer, on the ground or into any body of water. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Should not be released into the environment.

### Methods and material for containment and cleaning up

**Methods for Clean-up** Evacuate personnel to safe areas. Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Clean contaminated surface thoroughly. Prevent product from entering drains.

## 7. HANDLING AND STORAGE

### Precautions for Safe Handling

**Handling** Use only in an area equipped with a safety shower. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation. Do not breathe vapours or spray mist. Avoid contact with eyes, skin and clothing. Avoid repeated exposure. In case of insufficient ventilation, wear suitable respiratory equipment.

### Conditions for safe storage, including any incompatibilities

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. Keep out of the reach of children.

**Incompatible Materials** Strong Acids. Strong bases.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Chlorpropham 101-21-3	-	-	-
Other Ingredients N/A	-	-	-

### Appropriate engineering controls

**Engineering Controls** Ensure adequate ventilation, especially in confined areas.

### Individual protection measures, such as personal protective equipment

**Eye/Face Protection** Tight sealing safety goggles.

**Skin and body protection** Impervious gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. The type of protective equipment must be selected according to the concentration and amount of dangerous substance at the specific workplace.

**Respiratory Protection** In case of insufficient ventilation, wear suitable respiratory equipment.

<b>General Hygiene Considerations</b>	General industrial hygiene practice. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with eyes, skin and clothing. For environmental protection remove and wash all contaminated protective equipment before re-use. Wash hands before breaks and at the end of workday.
---------------------------------------	---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Appearance</b>	Clear Amber
<b>Physical State</b>	Liquid
<b>Odor</b>	No information available
<b>Odor Threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	No data available	
<b>Melting point / Freezing point</b>	No data available	Literary Reference
<b>Boiling point / boiling range</b>	No information available	
<b>Flash Point</b>	> 94 °C / 201 °F	PMCC
<b>Evaporation Rate</b>		
<b>Flammability (solid, gas)</b>		
<b>Flammability Limit in Air</b>		
<b>Upper flammability limit</b>	No information available	
<b>Lower flammability limit</b>	Not available	
<b>Vapor Pressure</b>	No information available	
<b>Vapor Density</b>	Not available	
<b>Specific Gravity</b>	0.994 g/mL @25°C	
<b>Water Solubility</b>	No information available	
<b>Solubility in other solvents</b>	No information available	
<b>Partition coefficient: n-octanol/water</b>	Not available	
<b>Autoignition temperature °C</b>	No data available	Estimated
<b>Decomposition temperature</b>	No data available	
<b>Kinematic Viscosity</b>	No information available	
<b>Dynamic Viscosity</b>	Not available	
<b>Explosive Properties</b>	No information available	
<b>Oxidizing Properties</b>	No information available	

### Other Information

<b>Softening Point</b>	No information available
<b>Molecular Weight</b>	No information available
<b>VOC content</b>	No information available
<b>Density</b>	8.29 lb/gal @25°C
<b>Bulk Density</b>	No information available
<b>Corrosion characteristics</b>	No information available

## 10. STABILITY AND REACTIVITY

<b>Reactivity</b>	Not applicable.
<b>Chemical Stability</b>	Stable under normal conditions
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur
<b>Conditions to Avoid</b>	Heat, flames and sparks.
<b>Incompatible Materials</b>	Strong Acids. Strong bases.
<b>Hazardous Decomposition Products</b>	Carbon monoxide. Carbon dioxide (CO <sub>2</sub> ). Nitrogen oxides (NO <sub>x</sub> ). Hydrogen chloride gas. Chloroanilines. Isocyanates.
<b>Possibility of Hazardous Reactions</b>	None under normal processing

## 11. TOXICOLOGICAL INFORMATION

### Product Information

<b>Oral LD50</b>	> 2,000 mg/kg; (rat)
<b>Dermal LD50</b>	> 2,000 mg/kg; (rabbit)
<b>LC50 Inhalation:</b>	> 2.10 mg/L; 4H; (rat)

**Component Information**

The following values are calculated based on chapter 3.1 of the GHS document .

**Information on likely routes of exposure**

<b>Eyes</b>	Minimal irritation. Avoid contact with eyes.
<b>Skin</b>	Harmful in contact with skin. Substance may cause slight skin irritation. Avoid contact with skin.
<b>Inhalation</b>	Harmful by inhalation. May cause irritation of the mucous membranes. May cause irritation of respiratory tract.
<b>Ingestion</b>	Harmful if swallowed. Harmful: danger of serious damage to health by prolonged exposure if swallowed.

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Carcinogenicity</b>	Limited evidence of a carcinogenic effect.
<b>Serious eye damage/irritation</b>	Minimal irritation. Rabbit eye.
<b>Skin Corrosion/Irritation</b>	Slight irritant. Rabbit skin.
<b>Sensitization</b>	Not a sensitizer.
<b>Reproductive Effects</b>	No information available.
<b>Mutagenic Effects</b>	No information available.
<b>Developmental Effects</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - Repeated Exposure</b>	No information available.
<b>Chronic Toxicity</b>	Limited evidence of a carcinogenic effect. Avoid repeated exposure.
<b>Aspiration Hazard</b>	No information available.

**Numerical measures of toxicity - Product Information****Acute Toxicity**

<b>Oral LD50</b>	> 2,000 mg/kg (rat)
<b>Dermal LD50</b>	> 2,000 mg/kg (rabbit)
<b>LC50 Inhalation:</b>	> 2.10 mg/L 4H (rat)

<b>12. ECOLOGICAL INFORMATION</b>
-----------------------------------

**Ecotoxicity**

Toxic to aquatic life with long lasting effects

<b>Persistence/Degradability</b>	No information available.
<b>Bioaccumulation/Accumulation</b>	Not available.
<b>Mobility in Soil</b>	No information available.

<b>13. DISPOSAL CONSIDERATIONS</b>
------------------------------------

**Waste treatment methods**

<b>Disposal Methods</b>	Contact waste disposal services. Dispose of in accordance with local regulations.
<b>Contaminated Packaging</b>	Dispose of in accordance with local regulations.

<b>14. TRANSPORT INFORMATION</b>
----------------------------------

<b><u>DOT</u></b>	Not regulated
<b><u>TDG</u></b>	Not regulated
<b><u>MEX</u></b>	Not regulated
<b><u>ICAO</u></b>	Not regulated
<b><u>IATA</u></b>	Not regulated
<b><u>IMDG/IMO</u></b>	Not regulated
<b><u>RID</u></b>	Not regulated
<b><u>ADR</u></b>	Not regulated
<b><u>ADN</u></b>	Not regulated

<b>15. REGULATORY INFORMATION</b>
-----------------------------------

*International Inventories*

<b>U.S.A. (TSCA)</b>	Does not comply
<b>Canada (DSL)</b>	Does not comply
<b>EU (EINECS)</b>	Does not comply
<b>EU (ELINCS)</b>	Does not comply
<b>Japan (ENCS)</b>	Does not comply
<b>China (IECSC)</b>	Does not comply
<b>Korea (KECL)</b>	Does not comply
<b>Philippines (PICCS)</b>	Does not comply
<b>Australia (AICS)</b>	Does not comply
<b>Mexico INV</b>	Does not comply

**Taiwan INV** Does not comply

Chemical Name	U.S.A. (TSCA)	Canada (DSL)	EU (EINECS)	EU (ELINCS)	
Chlorpropham	-	-	X	-	
Other Ingredients	-	-	-	-	
Component	Japan (ENCS)	China (IECSC)	Korea (KECL)	Philippines (PICCS)	Australia (AICS)
Chlorpropham 101-21-3 ( 36 )	Present (3)-3217	Present	Present	-	Present
Other Ingredients N/A ( 64 )	-	-	-	-	-
Chemical Name	Mexico INV		Taiwan INV		
Chlorpropham 101-21-3	Present		Present		
Other Ingredients N/A	-		-		

This material as a whole is exempt from the TSCA Inventory, FIFRA Regulated Pesticides, and Canadian PMRA Regulations.

*Federal Regulations*

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

*State Regulations*

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.



**State Right-to-Know**

This product does not contain any State Right-to-Know chemicals.

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

*Canada*

**WHMIS Statement**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**NFPA**

**Health** 3

**Flammability** 1

**Instability** 0

**Physical Hazard** 0



**Issuing Date**

06-Jul-2009

**Revision Date**

01-Feb-2018

**Revision Summary**

Not available

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**