



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

General Advice	Show this safety data sheet to the doctor in attendance.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician or poison control center immediately.
Skin Contact	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.
Inhalation	Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Call a physician or poison control center immediately.
Ingestion	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.
Self-Protection of the First Aider	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

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

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

General Hygiene Considerations	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.
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9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear Amber
Physical State	Liquid
Odor	No information available
Odor Threshold	No information available

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

Other Information

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

10. STABILITY AND REACTIVITY

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

11. TOXICOLOGICAL INFORMATION

Product Information

Oral LD50	> 2,000 mg/kg; (rat)
Dermal LD50	> 2,000 mg/kg; (rabbit)
LC50 Inhalation:	> 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

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

Information on toxicological effects

Symptoms	No information available.
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

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

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

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

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

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

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

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

14. TRANSPORT INFORMATION

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

15. REGULATORY INFORMATION

International Inventories

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

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	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



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06-Jul-2009

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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