

Safety Data Sheet

Issue Date: 03/20/2020

Ultim-ST

1. Identification: Chemical Product and Company

Product Name: Ultim-ST Agricultural Fungicide / Bactericide
 EPA Registration Number: 92690-1

Product Description: Wettable powder seed treatment fungicide / bactericide

Company Identification Germain's Seed Technology
 8333 Swanston Lane
 Gilroy, CA. 95020
 United States of America
 Tel: (408) 848-8120
 Fax: (408) 848-2124

24 Hr Emergency Telephone Number: 1-(800) 424-9300 CHEMTREC

2. Hazards Identification

Hazard Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communications Standard (29 CFR 1910.1200)

Acute toxicity – Oral	Category 4
Acute toxicity – Inhalation (Dusts/Mists)	Category 4
Serious Eye damage/eye irritation	Category 1

Label Elements

Emergency Overview

Danger



Hazard Statements

Harmful if swallowed
 Harmful if inhaled
 Causes serious eye damage

Appearance Powder

Physical State Solid

Precautionary Statements- Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke while using this product

Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements – Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contaminated clothing. Immediately call a Poison Center or doctor / physician

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a Poison Center or doctor/physician if you feel unwell

IF SWALLOWED: Call a Poison Center or doctor/physician Rinse mouth

Precautionary Statements – Disposal

Dispose of contents /container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

May be harmful in contact with skin. Very toxic to aquatic life with long term effects. Causes mild skin irritations. Repeated or prolonged contact may cause allergic reactions in very susceptible persons.

Unknown acute toxicity

Less than 5% of the mixture consists of consists of ingredients(s) of unknown toxicity

3. Composition/Information on Ingredients

Mixture

Chemical Name	Cas No. / EINECS No.	Weight/Percent
Copper Hydroxide	20427-59-2	76.8%
Inerts	No CAS#	23.2%

4. First Aid Measures

Emergency Number 1-(800)-424-9300 CHEMTREC

General Advice

Have the product container or label with you when calling a poison center or doctor, before going for treatment.

Eye Contact

Rinse Immediately with plenty of water, also under the eyelids, for at least 15 minutes

Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison control center or doctor for treatment advice.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothes before reuse. If skin irritation persists, call a physician. Call a poison control center or doctor for treatment advice.

Ingestion

Call a physician or poison control center immediately. Drink 1-2 glasses of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

Self-protection of the first aider

Ensure that medical personnel are aware of the materials(s) involved and take precautions to protect themselves.

Most important symptoms and effects, both acute and delayed

Symptoms

May cause redness and tearing of the eyes. May result in permanent damage including blindness. May cause skin irritation. Repeated contact may cause allergic reactions in very susceptible persons

Indication of any immediate medical attention and special treatment needed

Note to Physicians

Probable mucosal damage may contraindicate the use of gastric lavage. Treat symptomatically.

5. Fire-Fighting Measures

Suitable extinguisher media

Dry Chemical, CO₂, water spray or regular foam. Move containers from the fire area if you can do it without risk. Dike the fire-control water for later disposal.

Unsuitable extinguishing media: Do not scatter spilled material with pressure water streams.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors. Run off may pollute waterways

Explosion Data

Sensitivity to Mechanical Impact: None

Sensitivity to Static Discharge: None

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MISHA/NIOSH (approved or equivalent) and full protective gear. Cool containers / tanks with water spray.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions

Avoid contact with skin, eyes, clothing. Use personal protective equipment as required. Ensure adequate ventilation, especially in confined areas.

For emergency responders

Use personal protection. Recommended in Section 8. Ventilate the area.

Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not flush to surface water or sanitary sewer system.

Methods and material for containment and cleaning up

Methods for material containment

Contain spilled liquids with dry absorbents. Reduce airborne dust, Avoid run off into storm sewers or other bodies of water.

Methods for cleaning up

Clean up spill immediately. Absorb with inert material (such as dry sand, or earth), then place in a chemical waste container. Wash area with soap and water. Pick up liquid with additional absorbent and place in chemical waste container. Clean up spill immediately. Vacuum or sweep up material and place in a chemical waste container.

7. Handling and Storage

Precautions for safe handling

Advice on safe handling

Keep pesticide in original container. Do not store or transport near food or feed. Do not contaminate food or feed. Do not put concentrate into food or drink containers. Do not dilute concentrate in food or drink containers. Store in a cool, dry place, out of direct sunlight.

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and shoes immediately. Then wash thoroughly and put on clean clothing.

Keep Container tightly closed. Keep container in a cool well ventilated area. Stable at normal temperature and storage conditions in closed original package.

Storage

Keep Container tightly closed in a dry well ventilated place. Keep in properly labeled containers. Store out of reach of children. Keep away from food, drink and animal stuff. Store at temperatures not exceeding 35°C/ 91°F.

Packaging materials

Do not re-use packaging.

Incompatible materials

Incompatible with strong acids.

8. Exposure Controls/Personal Protection

End user must read and observe all precautions on product label

Eyes & Face

Wear safety glasses with protective shields. Do not get materials into eyes. Wear a face shield when mixing.

Skin and Body protection

Avoid contact with skin or clothing. Skin contact should be minimized by wearing protective clothing including long pants, long sleeved shirt, and shoes plus socks and chemical resistant gloves.

Engineering controls

Use in a well ventilated area.

General Hygiene Considerations

When using do not eat, drink, or smoke. Regular cleaning of equipment and work area is advised. Avoid contact with skin, eyes and clothing. Wash hands thoroughly

after handling. Keep away from food, drink, and animal feeding stuffs. Wash contaminated clothing before reuse.

9. Physical and Chemical Properties

Information and basic physical and chemical properties

Physical State	Solid
Appearance	Powder
Color	Blue
Odor	Practically odorless
Odor Threshold	No information available

Properties

pH	8.4-9.0 (2 g in 100 ml water)
Freezing Point	No information available
Boiling Point	No information available
Flash Point	No information available
Evaporation rate	No information available
Flammability	No information available
Flammability limit in Air	No information available
Vapor pressure	No information available
Vapor density	No information available
Water Solubility	Slightly soluble
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available
Density	No information available
Bulk Density	No information available
Pour Density	0.45 - 0.47 g/ml
Tap Density	0.59 - 0.65 g/ml

10. Stability and Reactivity

Reactivity

No data available

Chemical Stability

Stable under recommended storage conditions

Conditions to avoid

Storage near to reactive materials. Temperatures above 140° / 284°F

Incompatible materials

Strong acids

Hazardous Decomposition Product

Thermal decomposition can lead to release of irritating and toxic gases and vapors

11. Toxicological Information

Information on likely routes of exposure

Product Information

Inhalation Harmful by inhalation

Eye Contact: Corrosive to the eyes and may cause severe damage including blindness

Skin Contact: Contact may cause redness and irritation

Ingestion: Harmful if swallowed

Acute Testing:

Test	Measurement	Speices
Acute Dermal	LD ₅₀ > 5,000 mg/kg	Rat
Acute Inhalation	LC ₅₀ 0.50 mg/L	Rat (female)
Acute Oral	LD ₅₀ 1418 mg/kg	Rat
Dermal Irritation	RDI Index 2.2	Rabbit
Dermal Sensitization	Not a contact senitizer	Guinea Pigs

Carcinogen Classification:

Chemical Name	Oral LD50	ACGIH	NTP Carcinogen List
Copper Hydroxide	= 489 mg/kg (rat)		
Inerts			

Inhalation: Do not inhale any dust
Skin Contact: Can be a moderate irritant.
Eye Contact: Can be a moderate to eyes.
Long Term Exposure: No long term risks to man are associated by the normal use of this material.

12. Ecological

Ecotoxicity

Very toxic to aquatic life with long lasting effects

This pesticide is toxic to fish and aquatic organisms. Do not discard effluent containing this product into lakes, streams, ponds, oceans estuaries or other bodies of water unless in the accordance of the National Pollution Discharge Elimination System (NPDES) permit and the permit authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your Sate water board or regional office of the EPA.

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Copper hydroxide 2047-52-2	0.00939 72 h Pseudokirchneriella Subcapitata mg/L EC 50	0.135: 96H Oncorhynchus mykiss (rainbow trout) 50 mg/L LC 50	.0422: 48h Daphnia magna mg/l EC 50

Persistence And degradability

Not readily degradable

Bioaccumulation

Not likely to bioaccumulate

Other adverse effects

This mixture contains substances considered to be persistent, bioaccumulating non toxic (PBT)

13. Disposal Considerations

Waste water treatment methods

Disposal of Wastes: Pesticides waste may be acutely hazardous. Improper disposal is a violation of federal law. Disposal should be in accordance with applicable regional and local laws and regulations. Contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA regional Office for guidance on proper disposal of waste product.

Contaminated Packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations. Consult product label for additional information. Do not reuse container.

14. Transport Information

DOT

Not Regulated

TDG

Not regulated

IMDG

UN No: UN3077
 Proper Shipping Name:: Environmentally hazardous substance
 Hazard Class: 9
 Packing Group: –
 Description: UN3077, Environmentally hazardous substance,
 (copper hydroxide), marine pollutant
 Additional Information: –

15. Regulatory Information

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
IESCSC	Complies
KELC	Complies
PICCS	Complies
AICS	Complies

Legend

TSCA- Unites States Toxic Control Act 8(b) Inventory

DSL/NDSL – Canadian Domestic Substance List/Non-Domestic Substance

EINECS/ELINCS- European inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS- Japan Existing and New Chemical Substances

IESCSC- China Inventory of Existing Chemical Substances

KELC- Korean Existing and Evaluated Chemical Substances

PICCS- Phillipines Inventory of Chemicals and Chemical Substances

AICS- Australian Inventory of Chemical Substances

US-Federal Regulations

SARA 313 Section 314 of Title III of the Superfund Amendments and Reauthorization Act (1986) SARA. This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Federal Code of Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
Copper Hydroxide 2047-59-2	1

SARA 311/312 Hazard Categories	Yes
Acute health hazard	No
Chronic health hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA(Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the clean water act (40 CFR 122.21 and 40 CFR 123.42)

Chemical Name	CWA-Reportable Quantities	CWA-Toxic Pollutants	CWA-Priority Pollutants	CWA-Hazardous Substance
Copper Hydroxide 2047-59-2	-	x	-	-

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) (40CFR355). There may be specific reporting requirements at the local, regional or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

US State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Copper Hydroxide 2047-59-2	x	x	-

US EPA Label Information

EAP Pesticide Registration Number 92690-1

EPA Statement

This chemical contains a pesticide regulated by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazardous information required for Safety Data Sheets, and for work place labels for non-pesticide chemicals. The following is the hazard information as required on the pesticide label

Difference between SDS and EPA Pesticide Label

DANGER, Corrosive, Causes Irreversible eye damage. Wear goggles, face shield, or safety glasses. Causes skin irritation. Harmful if swallowed, absorbed through the skin or inhaled. May cause skin sensitization reactions in certain individuals. Avoid contact with skin, eyes, and clothing. Avoid breathing dust. Protective clothing should be worn. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before re-use.

16. Other Information, Including Date of Preparation of the last revision

NFPA Health Hazards 3 Flammability 1 Instability 0 Physical and Chemical Properties –

HMIS Health Hazards 3 Flammability 1 Physical Hazards 0 Personal protection x

Issue Date: 03/20/2020

Revision Date: 03/22/2022

Revision Note: EPA Reg. No.

Disclaimer

The information given is for your guidance and is based on the current state of our knowledge. For further details on the pesticide applied please contact Germain's Seed Technology or the pesticide manufacturers directly at Schirm USA, Inc.