



SAFETY DATA SHEET

SDS REVISIONS: ALL SECTIONS DATE OF ISSUE: 03/26/2018

CAPTAN 80 WDG

SUPERSEDES: 02/11/2015

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product Name CAPTAN 80 WDG

Other means of identification

Product Code PST-0052
UN/ID no 3077
Synonyms None
Registration Number(s) 34704-1075

Recommended use of the chemical and restrictions on use

Recommended Use Fungicide.
Uses advised against No information available

Details of the supplier of the safety data sheet

Manufacturer Address
 LOVELAND PRODUCTS, INC.
 P.O. Box 1286
 Greeley, CO 80632-1286

Emergency telephone number

Company Phone Number 1-888-LPI-CUST (574-2878)
Emergency Telephone Chemtrec 1-800-424-9300
 Medical Emergencies: 1-866-944-8565
 US regulations require reporting spills of this material that could reach any surface waters.
 The toll-free phone number for the US Coast Guard National Response Center is
 1-800-424-8802

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

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

Acute toxicity - Dermal	Category 4 - (H312)
Acute toxicity - Inhalation (Dusts/Mists)	Category 3 - (H331)
Serious eye damage/eye irritation	Category 1 - (H318)
Skin sensitization	Category 1 - (H317)

Label elements



Signal word

DANGER

Hazard statements

H312 - Harmful in contact with skin
 H317 - May cause an allergic skin reaction
 H318 - Causes serious eye damage
 H331 - Toxic if inhaled



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Precautionary Statements - Prevention

P280 - Wear protective gloves/protective clothing/eye protection/face protection
 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
 P271 - Use only outdoors or in a well-ventilated area
 P272 - Contaminated work clothing should not be allowed out of the workplace

Precautionary Statements - Response

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
 P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P310 - Immediately call a POISON CENTER or doctor/physician
 P311 - Call a POISON CENTER or doctor/physician
 P312 - Call a POISON CENTER or doctor/physician if you feel unwell
 P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
 P363 - Wash contaminated clothing before reuse

Precautionary Statements - Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
 P405 - Store locked up

Precautionary Statements - Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical Name	CAS No	Weight-%	GHS Classification	Trade Secret
Captan Technical (95.9 %AI)	133-06-2	60 - 100	Acute Tox. 3 (H331) Eye Dam. 1 (H318) Skin Sens. 1 (H317) Carc. 2 (H351) Aquatic Acute 1 (H400)	*
Stepwet DF-95	Proprietary	5 - 10		*
Kaolin Clay	1332-58-7	1 - 5		*
Amorphous Silicon Dioxide	7631-86-9	1 - 5		*

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.
 OSHA Hazard Communication 29 CFR 1910.1200



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4. FIRST AID MEASURES

Description of first aid measures

General advice	Get medical attention if symptoms occur.
Eye contact	Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
Skin contact	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Inhalation	Remove to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable by mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.
Ingestion	Call a poison control center or doctor for treatment advice. Have person sip a glass of water if able to swallow. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
Self-protection of the first aider	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Treatment: Treat symptomatically. Symptoms may be delayed. Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also call 1-866-944-8565 for emergency medical treatment information.

Note to physicians No specific antidote. Treat symptomatically.

Antidotes No data available

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing agent suitable for type of surrounding fire, Use CO₂, dry chemical, or foam

Specific hazards arising from the chemical

In the event of fire and/or explosion do not breathe fumes. May cause sensitization in susceptible persons. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.



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6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up Use personal protective equipment as required. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surface thoroughly. Soak up with inert absorbent material. Dam up. Pick up and transfer to properly labeled containers. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water. Take precautionary measures against static discharges.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Use with local exhaust ventilation.

Conditions for safe storage, including any incompatibilities

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

Incompatible materials Alkaline materials. Acidic materials.



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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Appropriate engineering controls

Engineering Controls Showers
 Eyewash stations
 Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles. Face protection shield.

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory protection Dependent on job function. If vapors or dusts exceed acceptable levels, wear a MSHA/NIOSH approved air-purifying respirator with any cartridges/filters approved for pesticides. If respirators are used, a program should be in place to assure compliance with 29 CFR 1910.134, the OSHA Respiratory Protection Standard. Wear a supplied air respirator if exposure concentrations are unknown.

General Hygiene Considerations When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling. Keep away from food, drink and animal feeding stuffs.



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9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Solid Powder
Appearance	Powder
Color	Off-white to tan
Odor	Pungent Organic
Odor threshold	No data available

<u>Property</u>	<u>Values (Remarks - Method)</u>
pH	5.5
Melting point / freezing point	No data available
Boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Flammability Limit in Air	
Upper flammability limit:	No data available
Lower flammability limit:	No data available
Vapor pressure	No data available
Vapor density	No data available
Specific Gravity	0.562 g/ml
Water solubility	Insoluble in water
Solubility in other solvents	No data available
Partition coefficient	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Kinematic viscosity	No data available
Dynamic viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

Other Information

VOC Content (%)	No data available
Density	35lbs/ft ³

Note: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.



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10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Moisture.

Incompatible materials

Alkaline materials. Acidic materials.

Hazardous Decomposition Products

Hydrogen chloride. Carbon oxides. Nitrogen oxides (NO_x). Hydrogen cyanide.



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11. TOXICOLOGICAL INFORMATION

Acute toxicity of the formulated product:

Chemical Name	Oral LD ₅₀	Dermal LD ₅₀	Inhalation LC ₅₀
Captan Technical (95.9 %AI)	= 3573 mg/kg (Rat) = 9 g/kg (Rat)	> 5000 mg/kg (Rat) > 5 g/kg (Rat)	= 0.72 mg/L (Rat) 4 h
Stepwet DF-95	= 1288 mg/kg (Rat)	= 200 mg/kg (Rabbit)	> 3900 mg/m ³ (Rat) 1 h
Amorphous Silicon Dioxide	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 2.2 mg/L (Rat) 1 h

Chemical Name	Skin corrosion/irritation	Eye damage/irritation	Respiratory sensitization	Skin sensitization
Captan Technical (95.9 %AI) 133-06-2		Category 1		Category 1

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

Germ cell mutagenicity No information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Captan Technical (95.9 %AI) 133-06-2	A3	Group 3	-	-
Amorphous Silicon Dioxide 7631-86-9	-	Group 3	-	-

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Not classifiable as a human carcinogen

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Chronic toxicity Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure. May cause adverse liver effects.

Target Organ Effects Eye damage/irritation, Gastrointestinal tract (GI), kidney, liver, Respiratory system, Skin.

Aspiration hazard No information available.

Information on likely routes of exposure

Product Information No data available

Inhalation No data available.

Eye contact No data available.

Skin contact No data available.

Ingestion No data available.



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12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Captan Technical (95.9 %AI) 133-06-2	-	LC50 0.168 - 0.238 mg/L 96 h Pimephales promelas LC50 0.059 - 0.070 mg/L 96 h Pimephales promelas LC50 0.0666 - 0.0804 mg/L 96 h Oncorhynchus mykiss LC50 0.3 mg/L 96 h Oncorhynchus mykiss LC50 0.075 mg/L 96 h Oncorhynchus mykiss LC50 126 mg/L 96 h Oncorhynchus mykiss LC50 0.119 - 0.167 mg/L 96 h Lepomis macrochirus LC50 0.047 - 0.111 mg/L 96 h Lepomis macrochirus LC50 0.16 mg/L 96 h Lepomis macrochirus	EC50 7 - 9.9 mg/L 48 h Daphnia magna
Stepwet DF-95	EC50 53 mg/L 72 h Desmodesmus subspicatus EC50 30 - 100 mg/L 96 h Desmodesmus subspicatus EC50 117 mg/L 96 h Pseudokirchneriella subcapitata EC50 3.59 - 15.6 mg/L 96 h Pseudokirchneriella subcapitata	LC50 8 - 12.5 mg/L 96 h Pimephales promelas LC50 15 - 18.9 mg/L 96 h Pimephales promelas LC50 22.1 - 22.8 mg/L 96 h Pimephales promelas LC50 4.3 - 8.5 mg/L 96 h Oncorhynchus mykiss LC50 4.62 mg/L 96 h Oncorhynchus mykiss LC50 4.2 mg/L 96 h Oncorhynchus mykiss LC50 10.2 - 22.5 mg/L 96 h Pimephales promelas LC50 6.2 - 9.6 mg/L 96 h Pimephales promelas LC50 13.5 - 18.3 mg/L 96 h Poecilia reticulata LC50 10.8 - 16.6 mg/L 96 h Poecilia reticulata LC50 1.31 mg/L 96 h Cyprinus carpio LC50 7.97 mg/L 96 h Brachydanio rerio LC50 9.9 - 20.1 mg/L 96 h Brachydanio rerio LC50 4.06 - 5.75 mg/L 96 h Lepomis macrochirus LC50 4.2 - 4.8 mg/L 96 h Lepomis macrochirus LC50 4.5 mg/L 96 h Lepomis macrochirus LC50 5.8 - 7.5 mg/L 96 h Pimephales promelas	EC50 1.8 mg/L 48 h Daphnia magna
Amorphous Silicon Dioxide 7631-86-9	EC50 440 mg/L 72 h Pseudokirchneriella subcapitata	LC50 5000 mg/L 96 h Brachydanio rerio	EC50 7600 mg/L 48 h Ceriodaphnia dubia

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available



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13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes

Wastes may be disposed of on site or at an approved waste disposal facility. Triple rinse (or equivalent), adding rinse water to spray tank. Offer container for recycling or dispose of in a sanitary landfill or by other procedures approved by appropriate authorities. Recycling decontaminated containers is the best option of container disposal. The Agricultural Container Recycling Council (ACRC) operates the national recycling program. To contact your state and local ACRC recycler visit the ACRC web page at <http://www.acrecycle.org/>. Do not contaminate water, food or feed by storage or disposal.

Contaminated packaging

Do not reuse container.

14. TRANSPORT INFORMATION

DOT

UN/ID no	3077
Proper shipping name	RQ Environmentally hazardous substance, solid, n.o.s. (Captan)
U.S. Surface Freight Classification:	INSECTICIDES OR FUNGICIDES, INSECT OR ANIMAL REPELLENTS, NOI, OTHER THAN POISON (NMFC 102120; CLASS: 60)
Hazard Class	9
Packing Group	III
Emergency Response Guide Number	171



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15. REGULATORY INFORMATION

<u>NFPA</u>	Health hazards 2	Flammability 0	Instability 0	Physical and Chemical Properties - Personal protection X	
<u>HMIS</u>	Health hazards 2	Flammability 0	Physical hazards 0		
	0 - Least	1 - Slight	2 - Moderate	3 - High	4 - Severe

US Federal Regulations

SARA 313

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

Chemical Name	SARA 313 - Threshold Values %
Captan Technical (95.9 %AI) - 133-06-2	1.0

SARA 311/312 Hazard Categories

Acute health hazard	Yes
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 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Captan Technical (95.9 %AI) 133-06-2	10 lb	-	-	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Captan Technical (95.9 %AI) 133-06-2	10 lb	-	RQ 10 lb final RQ RQ 4.54 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Captan Technical (95.9 %AI) - 133-06-2	Carcinogen

U.S. EPA Label Information

EPA Registration Number 34704-1075

EPA Statement

This chemical is a pesticide product registered by the Environmental Protection Agency 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, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

DANGER - PELIGRO

Difference between SDS and EPA Pesticide label

Causes irreversible eye damage. Harmful if swallowed or inhaled. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Do not get in eyes. Avoid contact with skin and clothing. Avoid inhalation of dust or spray mist.



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16. OTHER INFORMATION

Prepared By Product Stewardship and Regulatory Affairs

Reviewed By Environmental Health and Safety

Issue Date 03/26/2018

Revision Date 11/05/2018

Revision Note

16 SDS sections updated

CAPTAN 80 WDG is a trademark of Loveland Products, Inc.

Disclaimer

This safety data sheet was developed from information on the constituent materials identified herein and does not relate to the use of such materials in combination with any other material or process. No warranty is expressed or implied with respect to the completeness or ongoing accuracy of the information contained in this data sheet, and LOVELAND PRODUCTS, INC. disclaims all liability for reliance on such information. This data sheet is not a guarantee of safety. Users are responsible for ensuring that they have all current information necessary to safely use the product described by this data sheet for their specific purpose.

End of Safety Data Sheet