

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY**Product Name: **Preen Lawn Weed Control**

EPA No: 961-418

Recommended use

This product is an herbicide for landscape use.

Supplier/ManufacturerLebanon Seaboard Corporation
1600 East Cumberland Street
Lebanon PA 17042

Tel: (800) 233-0628 (717-273-1685)

Supplier Email: customerservice@lebsea.comEmergency telephone numbers

- Corporate: 1-800-233-0628
- Chemtrec (Spill) 1-800-424-9300
- Prozar (Health) 1-888-208-1368

2. HAZARDS IDENTIFICATION

OSHA Signal Word: Warning

EPA Signal Word: Caution

Hazard Statements:

H302: Harmful if swallowed in quantity. (Category 4)

H315: Causes skin irritation. (Category 2)

H317: May cause an allergic skin reaction in sensitive individuals. (Category 1B)

H320: Causes eye irritation. (Category 2B)

H373: May cause damage to specific organs (kidney, liver) by ingestion.

H401: Harmful to aquatic life. (Category 3)

**Precautionary Statements for Handling:**

P260: Do not breathe dust.

P264: Wash hands and exposed skin thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301, P312, P330: IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

P302, P352: IF ON SKIN: Wash with plenty of soap and water.

P313, P332: If skin irritation or rash occurs: Get medical advice/attention.

P305, P351: If in eyes: rinse cautiously with water for several minutes.

P337: If eye irritation persists, seek medical attention.

P362: Take off contaminated clothing and wash before reuse.

P273: Avoid uncontrolled release to the environment.

Keep out or reach of children.

Precautionary Statements for disposal - Dispose in accordance with all federal, state and local regulations.**Hazards not otherwise classified (HNOC):** None

Unknown acute toxicity

<2% of the mixture consists of ingredients of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight %
Dichlorophenoxyacetic acid (2,4-D)	94-75-7	1.37
R-2-(4- chloro-2-methylphenoxy) propionic acid (Mecoprop-P; MCPP)	16484-77-8	0.31
3,6-Dichloro-o-anisic acid (Dicamba)	1918-00-9	0.13
Diethylene glycol	111-46-6	1-2
Nonhazardous fillers	Various	Balance

4. FIRST AID MEASURES

Eye Contact	Rinse eyes cautiously with plenty of water for several minutes. If discomfort or irritation persists contact a physician.
Skin Contact	Wash with soap and water. If injury occurs, or if discomfort or irritation persists contact a physician.
Inhalation	If inhaled and discomfort occurs, move to fresh air, and keep person at rest in a position comfortable for breathing. If difficulty in breathing occurs and/or persists, administer oxygen and get medical attention. If medical advice is needed, have product container or label on hand.
Ingestion	Rinse mouth. Drink Plenty of water. If discomfort occurs, seek medical attention. Do not induce vomiting of an unconscious person.

Self-protection of the first aider: Use any appropriate personal protective equipment as required to avoid breathing dust, and to avoid eye and skin contact.

Most important symptoms and effects, both acute and delayed:

Symptoms: Dust irritation with nasal discomfort, or skin or eye irritation possible (on contact).

Indication of any immediate medical attention and special treatment needed: Treat Symptoms.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing media suitable to local circumstances and the surrounding environment. Options in this case include water, CO₂, ABC Dry Chemical extinguisher, or foam. Avoid stirring up dust with water stream.

Specific hazards arising from the chemical

Do not breath dusts or fumes. May cause sensitization by inhalation or skin contact. 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

Note: Excessive amounts of any burnable dusts can produce explosive mixtures if allowed to disperse in the air in confined areas where ignition sources occur. Prevent excessive dust dispersal in areas of use, storage, or production.

Protective equipment and precautions for firefighters

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures

Personal Precautions	Use reasonable personal protective equipment as required to prevent contact with eyes or skin and to avoid breathing dust. Remove ignition sources prior to clean-up.
Environmental precautions	Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.
Methods for containment	Prevent further leakage or spillage, if safe to do so.
Methods for clean-up	Use reasonable 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 excess with inert absorbent material.

7. HANDLING AND STORAGE

Safe Handling	Read all safety instructions before handling. Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when handling this product. Avoid breathing dusts. Use only outdoors or in a well ventilated area.
Storage Conditions	Keep containers tightly closed in a cool, well-ventilated place. Keep away from food, drink and animal feed. Keep out of the reach of children.
Incompatible materials	Avoid strong acids or alkali, or other reactive substances.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH
2, 4-Dichlorophenoxyacetic acid (2,4-D)	10 mg/m ³ (TWA inhalable)	10 mg/m ³ (TWA total)	100 mg/m ³ IDLH* 10 mg/m ³ TWA
Nuisance Dusts	10 mg/m ³ (TWA inhalable)	15 mg/m ³ (TWA total) 50 mppcf (TWA total) 5 mppcf (TWA respirable)	-

*IDLH refers to amounts that are "Immediately Dangerous to Life or Health"

Engineering controls: Use with adequate ventilation to prevent dust buildup in air. Have eyewash and shower facilities in case of eye or skin contact.

Individual protection measures: Wear protective gloves/protective clothing/eye protection/face protection.

Eye protection	Safety glasses, or goggles if eye contact is likely.
Skin and Body Protection	Gloves and coveralls recommended.
Respiratory Protection	Dust mask recommended for dusty or misty conditions. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene

When using product, do not eat, drink or smoke. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Contaminated clothing should not be allowed out of the workplace.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Solid
Appearance	Granules
Color	Yellow
Odor	Slight
Odor Threshold	No information available
pH	Not applicable
Melting point/freezing point	Not applicable
Boiling point / boiling range	Not applicable
Flash point	No information available
Evaporation rate	Not applicable
Flammability (solid, gas)	No information available
Flammability Limits in Air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure	Not applicable
Vapor density	Not applicable
Specific Gravity	Not applicable
Water solubility	Mostly Insoluble in water.
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Oxidizing properties	Not an oxidizer

10. STABILITY AND REACTIVITY

Reactivity

Not particularly reactive.

Chemical stability

Stable.

Possibility of Hazardous Reactions

None under normal use or storage.

Hazardous polymerization

Will not occur.

Conditions to avoid

Extremes of temperature and prolonged sunlight exposure may degrade product.

Incompatible materials

Strong acids or alkali, or other reactive substances.

Hazardous Decomposition Products

May emit toxic fumes under fire conditions, such as Nitrogen oxides (NO_x), Ammonia, Oxides of sulfur, Hydrogen chloride and Carbon monoxide.

11. TOXICOLOGICAL INFORMATION

Routes of exposure: Ingestion, eyes (contact), skin (contact), dust inhalation

Ingestion:	May irritate the digestive tract if ingested in quantity, causing nausea, vomiting and diarrhea.
Eye contact:	Moderately irritating to eyes on contact.
Skin contact:	May be harmful if absorbed through skin.
Sensitization	The concentrated herbicide mixture has been shown to be a contact skin sensitizer in guinea pigs.
Germ cell mutagenicity	No ingredients implicated.
Reproductive toxicity	No ingredients implicated.
STOT - single exposure	No information available
STOT - repeated exposure	No information available
Chronic toxicity:	Lungs-nuisance dusts
Target Organ Effects	Lungs-nuisance dusts; Liver, kidney(diethylene glycol)
Aspiration hazard	No information available
Carcinogenicity	Two of the three herbicides in this product are chlorophenoxy herbicides. The International Agency for Research on Cancer (IARC) lists chlorophenoxy herbicides in its Group 2B (limited evidence for Carcinogenicity in humans.) The US EPA has given the chlorophenoxy Herbicides 2,4-D, 2,4-DP, MCPP, and MCPA a Class D classification (not classifiable as to human carcinogenicity.) More current lifetime feeding studies in rats and mice using the herbicide 2,4-D did not show carcinogenic effects and a recent World Health Organization (WHO) review of 2,4-D toxicology has concluded that this particular chlorophenoxy herbicide is not a carcinogen.

12. ECOLOGICAL INFORMATION

Toxic to aquatic life with long lasting effects.

Ecotoxicity of 2, 4-Dichlorophenoxyacetic acid (2,4-D):

Fish:	96 hour LC50: 20 mg/L (<i>Cyprinus carpio</i>) semi-static
Microbes:	EC50 5.74 mg/l 15 min
Invertebrates:	72-hour EC50: 417.8 mg/L (<i>Daphnia magna</i>); 48-hour EC50: 17.6 - 32.6 mg/L (<i>Daphnia magna</i>) static
Plants:	120-hour EC50: 20 - 52 mg/L (<i>Pseudokirchneriella subcapitata</i>)

The herbicide ingredients are toxic to aquatic plants and aquatic some invertebrates. Use with care when applying to turf areas adjacent to any bodies of water. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff from treated turf may adversely affect aquatic organisms in adjacent bodies of water. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwater. Application around a cistern or well may result in contamination of groundwater or drinking water, particularly where soils are permeable and water table is shallow.

Persistence and degradability	No information available
Bioaccumulation	No information available
Other adverse effects	No information available

13. DISPOSAL CONSIDERATIONS

This material, as supplied is a hazardous waste according to federal regulations (40 CFR 261).

Disposal of wastes:

This product is a hazardous waste material.

EPA Waste Numbers are applicable for this product's components.
 Dispose of in accordance with Local, State, and Federal regulations.

Contaminated packaging

US Federal: special packaging considerations for pesticide containers. If the container is empty, do not reuse it. Place it in the trash, unless the label specifies a different procedure. Follow local regulations.

14. TRANSPORT INFORMATION

DOT Description: HERBICIDES, NOI - NMFC #50320

In our current available sizes, this product does not qualify as a hazardous material.

DOT:	Not Regulated	ADR:	Not Regulated
Proper Shipping Name:	Non Regulated	ADN:	Not Regulated
Hazard Class:	Not Applicable	RID:	Not Regulated
IATA:	Not Regulated	IATA:	Not Regulated
Proper Shipping Name:	Non Regulated	TDG:	Not Regulated
Hazard Class:	Not Applicable	ICAO:	Not Regulated
IMDG/IMO	Not Regulated	MEX:	Not Regulated
Hazard Class	Not Applicable		
Marine Pollutant	No		

15. REGULATORY INFORMATION

U.S. EPA Label Information

EPA Pesticide Registration Number 2217-640

Federal Insecticide, Fungicide, Rodenticide Act Regulations

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: **Caution.**

International Inventories

- TSCA** Not Listed
- DSL/NDL** Not Listed
- EINECS/ELINCS** Not Listed
- ENCS** Not Listed
- IECSC** Not Listed
- KECL** Not Listed
- PICCS** Not Listed
- AICS** Not Listed

Legend:

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS** - Japan Existing and New Chemical Substances
- IECSC** - China Inventory of Existing Chemical Substances
- KECL** - Korean Existing and Evaluated Chemical Substances
- PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- AICS** - Australian Inventory of Chemical Substances

Chemical Name	TSCA	DSL	NDL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Dichlorophenoxyacetic acid (2,4-D)	X	X		X		X	X	X	X	X
R-2-(4-chloro-2-methylphenoxy) propionic acid (Mecoprop; MCP)				X						
3,6-Dichloro-o-anisic acid (Dicamba)				X		X		X	X	X

US Federal Regulations

SARA 313

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; Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA).

Chemical Name	CAS No.	Weight %	SARA 313 Threshold Value
2, 4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	1.37	0.1%
3,6-Dichloro-o-anisic acid (Dicamba)	1918-00-9	0.13	1.0%

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

Clean Water Act: This product contains the following substances regulated as pollutants pursuant to the Clean Water Act.

Reportable quantities are shown:

2, 4-Dichlorophenoxyacetic acid (2,4-D) 100-Lb
 3,6-Dichloro-o-anisic acid (Dicamba) 100-Lb

CERCLA REPORTABLE QUANTITY: 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	Hazard. Subst. RQs	CERCLA/SARA RQ	Reportable Quantity
2, 4-Dichlorophenoxyacetic acid (2,4-D); 94-75-7	100 Lb	-	100 Lb (45.4 kg) Final RQ
3,6-Dichloro-o-anisic acid (Dicamba); 1918-00-9	1000 LB	-	1000 Lb (454 kg) Final RQ

State Right-to-Know Components:

2, 4-Dichlorophenoxyacetic acid (2,4-D): NJ, MA, PA
 3,6-Dichloro-o-anisic acid (Dicamba): NJ, MA, PA
 Diethylene glycol PA

California Proposition 65: This product contains detectable quantities of chemicals known to the State of California to cause cancer.

International

Mexico Exposure Limits for 2, 4-Dichlorophenoxyacetic acid (2,4-D): TWA 10 mg/m³; STEL 20mg/m³

16. OTHER INFORMATION

NFPA: Health hazards 1 Flammability 0 Instability 0 Physical and Chemical Properties -
HMIS: Health hazards 1 Flammability 0 Physical Hazards 0 Personal Protection X

Disclaimer

The information provided in this material 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 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.