



1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product Name: Preen Lawn Weed Control

EPA No: 000961-00418-000000

Product Identity: Post emergent pesticide, granular

Supplier/Manufacturer

Lebanon Seaboard Corporation
1600 East Cumberland Street
Lebanon PA 17042

Tel: 1-800-233-0628 USA

(717-273-1685) INTL

Supplier Email: customerservice@lebsea.com

Emergency telephone numbers:

Chemtrec (Spill) 1-800-424-9300 Prosar (Health) 888-208-1368

2. HAZARDS IDENTIFICATION

OSHA Signal Word: Warning

EPA Signal Word: CAUTION

Hazard Statements:

H302: Harmful if swallowed. (Category 4)

H312: Harmful in contact with skin. (Category 4)

H316: Causes mild skin irritation. (Category 3)

H320: Causes eye irritation. (Category 2B)

H332: Harmful if inhaled. (Category 4)

H335: May cause respiratory irritation. (Category 3)

H373: May cause damage to organs through prolonged or repeated exposure. (Category 2)

H400: Very toxic to aquatic life. (Category 1)

Pictogram:



Precautionary Statements for handling:

P260: Do not breathe dust/fume/mist/vapors/spray.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P264: Wash hands and exposed skin thoroughly after handling.

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

P271: Use only outdoors or in a well-ventilated area.

P273: Avoid release to the environment.

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

P305: If in eyes, rinse with water and seek medical attention if symptoms persist.

P314: Get medical advice/attention if you feel unwell.

P322: Specific measures (see Health and Safety on this label).

P330: Rinse mouth.

P363: Wash contaminated clothing before reuse.

P391: Collect spillage.

P301: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

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

P312: IF INHALED: Call » POISON CENTER or doctor/physician if you feel unwell.

P332: If skin irritation occurs: Get medical advice/ attention.

P337: If eye irritation persists: Get medical advice/attention.

P405: Store locked up.

P403: Store in a well-ventilated place.

P233: Keep container tightly closed.

P501: Dispose of contents/container properly as required by law for waste pesticides.

Keep out of 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: <1% of the mixture consists of ingredients of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight %
Cellulose paper fiber	9004-34-6	45 - 50
2,4-D Acid	94-75-7	1 - 5
Dicamba	1918-00-9	0.1 - 0.5
Mecoprop-P	16484-77-8	0.1 - 0.5
Corn Cobs	No CAS Number	45 - 50
Dipropylene glycol	111-46-6	1 - 5
non Hazardous Ingredients	Various	Balance

4. FIRST AID MEASURES

Eye Contact 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.

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 you feel unwell, call a poison control center or 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 for nuisance dusts.

Most important symptoms and effects, both acute and delayed: Nuisance dust irritation may occur with nasal discomfort under highly dusty conditions.

Eye irritation on contact with redness, tearing and burning sensation.

Coughing, sneezing, or irritation of nose and throat.

Redness, itching, or burning sensation on skin with prolonged contact.

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

Consult physician if discomfort or irritation persists.

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 extinguisher stream.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire, do not breathe fumes.

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 (bunker) gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures

Personal Precautions	Use dust mask and gloves as needed or other reasonable personal protective equipment as required to prevent contact with eyes or skin. Remove ignition sources prior to clean-up. If in eyes, rinse cautiously with water for several minutes. If eye irritation persists: Seek medical advice. If experiencing respiratory symptoms: seek medical attention. If experiencing significant respiratory symptoms: seek medical attention.
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 dust mask and/or reasonable personal protective equipment as required to avoid breathing dusts. Moisten or cover powder spill with plastic sheet or tarp to minimize spreading. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Soak up excess with inert absorbent material. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Safe Handling	Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required to avoid breathing dusts or mists, and to prevent eye contact. Wash hands thoroughly after handling.
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Storage Conditions Keep containers tightly closed in a cool, well-ventilated place. 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 IDLH*
Nuisance Dusts (for granulars)	10 mg/m ³ (TWA- Total)	15 mg/m ³ (TWA total) 50 mppcf (TWA total) 5 mppcf (TWA respirable)	Not Established

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

Engineering controls: Use with adequate ventilation and follow safe work practices to prevent dust buildup in air.

Individual protection measures Use personal protective equipment as required to avoid breathing dust/mist, and to prevent eye contact.

Eye protection	Provide face and eye protection: face shield and goggles recommended if face or eye contact is likely.
Skin and Body Protection	Gloves and standard work 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.

Also see Precautionary Statements in Section 2

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Granular Solid
Appearance	Granular Solid
Color	Mixed, various
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
Water solubility	Mostly insoluble
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 particularly reactive

10. STABILITY AND REACTIVITY

Reactivity

Not Reactive

Chemical stability

Stable

Possibility of Hazardous Reactions

May release heat and fumes when mixed in solution with incompatible reactive materials.

Hazardous polymerization

Will not occur.

Conditions to avoid

High heat, sparks and open flames, as some ingredients may be burnable.

Incompatible materials

Strong acids or alkali, or other reactive substances.

Hazardous Decomposition Products

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

11. TOXICOLOGICAL INFORMATION

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

Symptoms	May irritate the digestive tract if ingested in quantity, causing nausea, vomiting and diarrhea. Eye irritation on contact with redness, tearing and burning sensation. Coughing, sneezing, or irritation of nose and throat. Redness, itching, or burning sensation on skin with prolonged contact.
Sensitization	No information available.
Germ cell mutagenicity Carcinogenicity	None known unless noted below in Other IARC Group 2B: Possibly carcinogenic to humans
Reproductive toxicity	No information available.
STOT - single exposure	No information available
STOT - repeated exposure	No information available
Chronic toxicity	Yes
Target Organ Effects	Lungs-Nuisance dusts Liver, Kidney
Aspiration hazard Other	No information available

12. ECOLOGICAL INFORMATION

Pesticides can be very toxic to aquatic organisms on an acute basis.

Persistence and degradability	No information available
Bioaccumulation	No information available

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Disposal of wastes:

Excess product should be used up according to label directions, to avoid disposal issues. Dispose of in accordance with Local, State, and Federal regulations.

Contaminated packaging

Do not recycle or reuse any pesticide container. Follow local regulations.

14. TRANSPORT INFORMATION

NMFC 155050-5 PESTICIDES,NOI,INCLUDING DEFOLIANTS, FUNGICIDES OR INSECTICIDES:
25<35PCF

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

15. REGULATORY INFORMATION

TSCA (USA): Complies.

General Product Information: This product is not federally regulated as a hazardous material.

Clean Air Act: No information is available.

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)

SARA 313 Superfund Amendments: This product contains no 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:	Yes
Chronic:	Yes
Fire:	No
Sudden release of pressure:	No
Reactive:	No

CERCLA: 2,4-D RQ=100 Lb
Dicamba RQ = 1000

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 detectable quantities of chemicals known to the State of California to cause cancer or birth defects, or other reproductive harm.

Component Analysis - State: MA, NJ, PA

NJ, PA

Right to Know: Diethylene glycol: PA

16. OTHER INFORMATION

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.

DONGGUAN NUOXING ELECTRONIC CO., LTD

Material Safety Data Sheet for Alkaline Batteries

Ref.No.:NX2013052101

Section I - Information of Manufacturer

Manufacturer's Name: Dongguan NuoXing Electronic Co.,Ltd	
Address: Baihao Industrial Area, Houjie Town, Dongguan City, Guangdong Province, China	
Telephone number/FAX number: TEL:0086-769-85991992 FAX: 0086-769-85889734	
Post Code: 523957	Email:8888@1681788.com.cn
Battery type: LR03/LR6/LR14/LR20/LR1/6LR61	
MSDS Creation Date: May 21 th 2013	

Section II - Hazardous Ingredients / Identity Information

Description	CAS No.	% of Total Weight	
Manganese Dioxide	1313-13-9	40	Wt%
Zinc Metal	7440-66-6	16	Wt%
Potassium hydroxide	1310-58-3	8	Wt%
Water	7732-18-5	10	Wt%
Iron	7439-89-6	17	Wt%
Paper	RR-01108-5	1	Wt%
Copper	7440-50-8	3	Wt%
Nylon	9008-75-7	2	Wt%
Graphite	7782-42-5	3	Wt%

Section III - Physical / Chemical Characteristics

Boiling Point: N.A	Specific Gravity(H ₂ O=1): N.A
Vapor Pressure(mm Hg): N.A	Vapor Density (AIR=1): N.A
Solubility in Water: N.A	Melting Point : N.A
Appearance and Odor	Cylindrical Shape, odorless

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used): N.A	Flammable Limits : N.A.
LEL: N.A	UEL: N.A
Extinguishing Media: . Carbon Dioxide, Dry Chemical or Foam extinguishers. Do not dispose of battery in fire - may explode. Special Fire Fighting Procedures: N.A. Do not short-circuit battery - may cause burns.	

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Section V - Reactivity Data

Stability : Stable
Incompatibility (Materials to Avoid): Hazardous Decomposition or Byproducts
Polymerization: Will Not Occur

Section VI - Health Hazard Data

Route(s) of Entry: Inhalation? N.A ; Skin? N.A; Ingestion? N.A
Health Hazard (Acute and Chronic) / Toxic logical information ◆ In case of electrolyte leakage, skin will be itchy when contaminated with electrolyte. In contact with electrolyte can cause severe irritation and chemical burns.

Section VII – First Aid Measures

First Aid Procedures: ◆ If electrolyte leakage occurs and makes contact with skin, wash with plenty of water immediately. ◆ If electrolyte comes into contact with eyes, wash with copious amounts of water for fifteen (15) minutes, and contact a physician.

Section VIII– Accidental Release or Spillage

Steps to Be Taken in Case Material is Released or Spilled ◆ Batteries that are leakage should be handled with rubber gloves. ◆ Avoid direct contact with electrolyte.
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Section IX – Handling and Storage

Safe handling and storage advice ◆ Batteries should be handled and stored carefully to avoid short circuits. ◆ Do not store in disorderly fashion, or allow metal objects to be mixed with stored batteries ◆ Never disassemble a battery. ◆ Do not touch internal material with bare hands. ◆ Keep batteries between -30°C and 35°C.

SectionX – Ecological Information

◆ Ecological Information : N.A

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Section XI – Exposure Controls / Person Protection

- ◆Occupational Exposure Limits: LTEP N.A.
- ◆Respiratory Protection (Specify Type): N.A.
- ◆Ventilation Local Exhausts: N.A. ◆Protective Gloves: N.A.
- ◆Eye Protection: N.A.
- ◆Other Protective Clothing or Equipment: N.A.

Section XII – Disposal Method

- ◆Dispose of batteries according to government regulations.

Section XIII –Regulation Information

Regulation Information

- ◆Special requirement be according to the local regulations

Section XIV – Transportation Information

Primary alkaline cylindrical batteries are considered to be “dry cell” batteries and are unregulated for purposes of transportation by the U.S. Department of Transportation (DOT), International Civic Aviation Administration(ICAO), International Air Transport Association (IATA), the International Maritime Organization (IMO), the “Accord Européen Relatif au Transport International des Marchandises Dangereuses par Route” (ADR)) and the “Règlement concernant le transport international ferroviaire de marchandises Dangereuses” (RID).

Alkaline batteries are not subject to the dangerous goods regulations provided they meet the requirements contained in the following special provisions.

Regulatory Body	Special Provisions
ADR	Not regulated
IMDG	Not regulated
UN	Not regulated
US DOT	49 CFR 172.102 Special Provision 130
IATA	A123
ICAO	Not regulated

IATA DGR (54 Edition) : Special Provision A123: “Examples of such batteries are: alkali-manganese, zinc-carbon,, nickel-metal hydride and nickel-cadmium batteries. Any electrical battery ... having the potential of a dangerous evolution of heat must be prepared for transport as to prevent (a) a short-circuit (e.g. in the case of batteries, by the effective insulation of exposed terminals...) is forbidden from transport; and (b) accidental activation. The words “Not Restricted” and the Special Provision number must be included in the description of the substance on the Air Waybill as required by 8.2.6,when an Air Waybill is issued.”

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Material Safety Data Sheet for Alkaline Batteries

Ref.No.:NX2013052101

EU: As primary alkaline cylindrical cells/batteries are not explicitly mentioned in RID/ADR, there are no special Dangerous Goods shipment requirements for these products.

USA: 49 CFR § 172.102 Special Provision 130: "For other than a dry battery specifically covered by another entry in the § 172.101 Table, "Batteries, dry" are not subject to the requirements of this subchapter when they are securely packaged and offered for transportation in a manner that prevents the dangerous evolution of heat (for example, by the effective insulation of exposed terminals) and protects against short circuits."

Code of practice for packaging and shipment of primary batteries given in IEC

60086-1: The packaging shall be adequate to avoid mechanical damage during transport, handling and stacking. The materials and pack design shall be chosen so as to prevent the development of unintentional electrical conduction, corrosion of the terminals and ingress of moisture. Shock and vibration shall be kept to a minimum. For instance, boxes should not be thrown off trucks, slammed into position or piled so high as to overload battery containers below. Protection from inclement weather should be provided.

Section XV-Other Information

◆The data in this Material Safety Data Sheet relates only to the specific material designated herein.

Section XVI – Measures for fire extinction

◆In case of fire, it is permissible to use any class of extinguishing medium on these batteries or their packing material. Cool exterior of batteries if exposed to fire to prevent rupture.

◆Fire fighters should wear self-contained breathing apparatus.