1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product Name: Lebanon ProScape 0-0-7 with Lockup Herbicide

EPA No: 62719-590-961

Recommended use
This product is a mixed fertilizer/herbicide for landscape use.

Supplier/Manufacturer
Lebanon Seaboard Corporation
1600 East Cumberland Street
Lebanon PA 17042
Tel: (800) 233-0628 (717-273-1685)  Supplier Email: customerservice@lebsea.com

Emergency telephone number
800-233-0628  Chemtrec 1-800-424-9300  Prosar 888-208-1368

2. HAZARDS IDENTIFICATION

OSHA Signal Word: Warning
EPA Signal Word: Caution

Hazard Statements:
H302: Harmful if swallowed in large quantity.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.
H401: Toxic to aquatic life, (especially plants).

Carcinogen Status:
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, including 2,4-D, 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.

Precautionary statements
P261: Avoid breathing dust.
P264: Wash 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+ P391: Avoid release to the environment. Collect spillage.
P280: Wear protective gloves/ eye protection/ face protection.
P285: In case of inadequate ventilation wear respiratory 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.
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.
P322: Specific measures (see supplemental first aid instructions on the label).
P363: Wash contaminated clothing before reuse.

Precautionary Statements for disposal - Dispose in accordance with all federal, state and local regulations.

Hazards not otherwise classified (HNOC):
Unknown acute toxicity  
<1% of the mixture consists of ingredients of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dichlorophenoxyacetic acid (2,4-D)</td>
<td>94-75-7</td>
<td>1.04</td>
</tr>
<tr>
<td>Dipropylene glycol</td>
<td>25265-71-8</td>
<td>0.31</td>
</tr>
<tr>
<td>3,6-Dichloro-o-anisic acid (Dicamba)</td>
<td>1918-00-9</td>
<td>0.08</td>
</tr>
<tr>
<td>Penoxsulam</td>
<td>219714</td>
<td>0.01</td>
</tr>
<tr>
<td>Nonhazardous fertilizers and fillers</td>
<td>Various</td>
<td>Balance</td>
</tr>
</tbody>
</table>

### 4. FIRST AID MEASURES

**Eye Contact** Rinse eyes with plenty of water. 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. may cause skin sensitization in susceptible individuals.

### 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. Store locked up. 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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>2, 4-Dichlorophenoxyacetic acid (2,4-D)</td>
<td>10 mg/m³ (TWA inhalable)</td>
<td>10 mg/m³ (TWA total)</td>
<td>100 mg/m³* IDLH(^*) 10 mg/m³ TWA</td>
</tr>
<tr>
<td>Nuisance Dusts</td>
<td>10 mg/m³ (TWA inhalable)</td>
<td>15 mg/m³ (TWA total) 50 mppcf (TWA total) 5 mppcf (TWA respirable)</td>
<td>-</td>
</tr>
</tbody>
</table>

*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

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

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

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 (NOx), 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: Harmful if absorbed through skin.

Sensitization: May cause an allergic skin reaction in sensitive individuals.

Germ cell mutagenicity: No information available.

Reproductive toxicity: No information.

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: Central nervous system, kidney, liver, skin.

Aspiration hazard: Not likely in this form.

Carcinogenicity (2,4-D): IARC: 2B (Limited evidence for carcinogenicity in humans)

US EPA: Class D (Not classifiable as to human carcinogenicity)

WHO: Concluded that 2,4-D is not a carcinogen

12. ECOLOGICAL INFORMATION

Harmful to aquatic life with long lasting effects.

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

Fish: 96 hour LC50: 20 mg/L (Cyprinus carpio) semi-static

Microbes: EC50 5.74 mg/l 15 min

Invertebrates: 72-hour EC50: 417.8 mg/L (Daphnia magna); 48-hour EC50: 17.6 - 32.6 mg/L (Daphnia magna) static

Plants: 120-hour EC50: 20 - 52 mg/L (Pseudokirchneriella subcapitata)

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.

2,4-D:

Persistence and degradability: 2,4-D degrades rapidly in soils and aerobic aquatic environments. It degrades more slowly in anaerobic (limited oxygen) aquatic environments.

Bioaccumulation: Bioconcentration potential of 2,4-D is low (BCF < 100 or Log P ow < 3).

Other adverse effects: No information available

Penoxsulam:

Persistence and degradability: In soil, penoxsulam is broken down by microbial degradation.

Bioaccumulation: The potential for penoxsulam to accumulate in the food chain (bioconcentrate) is low.

Other adverse effects: Penoxsulam is adsorbed by soil and has low to moderate leaching potential in most soil types.
13. DISPOSAL CONSIDERATIONS

**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.

<table>
<thead>
<tr>
<th>DOT:</th>
<th>Not Regulated</th>
<th>ADR:</th>
<th>Not Regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper Shipping Name:</td>
<td>Non Regulated</td>
<td>ADN:</td>
<td>Not Regulated</td>
</tr>
<tr>
<td>Hazard Class:</td>
<td>Not Applicable</td>
<td>RID:</td>
<td>Not Regulated</td>
</tr>
<tr>
<td>IATA:</td>
<td>Not Regulated</td>
<td>IATA:</td>
<td>Not Regulated</td>
</tr>
<tr>
<td>Proper Shipping Name:</td>
<td>Non Regulated</td>
<td>TDG:</td>
<td>Not Regulated</td>
</tr>
<tr>
<td>Hazard Class:</td>
<td>Not Applicable</td>
<td>ICAO:</td>
<td>Not Regulated</td>
</tr>
<tr>
<td>IMDG/IMO</td>
<td>Not Regulated</td>
<td>MEX:</td>
<td>Not Regulated</td>
</tr>
<tr>
<td>Hazard Class</td>
<td>Not Applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marine Pollutant</td>
<td>No</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**

<table>
<thead>
<tr>
<th>TSCA</th>
<th>Not Listed</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSL/NDSL</td>
<td>Not Listed</td>
</tr>
<tr>
<td>EINECS/ELINCS</td>
<td>Not Listed</td>
</tr>
<tr>
<td>ENCS</td>
<td>Not Listed</td>
</tr>
<tr>
<td>IECSC</td>
<td>Not Listed</td>
</tr>
<tr>
<td>KECL</td>
<td>Not Listed</td>
</tr>
<tr>
<td>PICCS</td>
<td>Not Listed</td>
</tr>
<tr>
<td>AICS</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

**Legend:**
- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL - 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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>TSCA</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>ELINCS</th>
<th>ENCS</th>
<th>IECSC</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dichlorophenoxyacetic acid (2,4-D)</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3,6-Dichloro-o-anisic acid (Dicamba)</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Page 6 of 7
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).

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

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

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) 1000 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):

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazard. Subst. RQs</th>
<th>CERCLA/SARA RQ</th>
<th>Reportable Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2, 4-Dichlorophenoxyacetic acid (2,4-D); 94-75-7</td>
<td>100 Lb</td>
<td></td>
<td>100 Lb (45.4 kg) Final RQ</td>
</tr>
<tr>
<td>3,6-Dichloro-o-anisic acid (Dicamba); 1918-00-9</td>
<td>1000 LB</td>
<td></td>
<td>1000 Lb (454 kg) Final RQ</td>
</tr>
</tbody>
</table>

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
- Oxidipropanol (Dipropylene 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 20 mg/m³

16. OTHER INFORMATION

NFPA: Health hazards 2 Flammability 0 Instability 0 Physical and Chemical Properties - 0
HMIS: Health hazards 2 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.