



Revision Date: 01/19/2016

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANYProduct Name: **Lebanon Pro 20-0-4 with 0.86% Pendimethalin**

EPA No: 19713-615-961

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.comEmergency 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 and Hazard Categories:

H320: May cause eye irritation (Category 2B)

H333: May be harmful if inhaled repeatedly over prolonged periods. (Category 5)

H351: Suspected of causing cancer by prolonged/repeated inhalation, or ingestion. (Group 2B)

H403: Harmful to aquatic life. (Category 2)

May irritate the digestive tract if ingested in quantity.

**Precautionary Statements for handling:**

P202: Do not handle until all safety precautions have been read and understood.

P261: Avoid breathing dust.

P264: Wash hands and exposed skin thoroughly after handling.

P281: Use appropriate personal protective equipment as required to avoid breathing dust.

P308: If exposed or concerned, seek medical advice.

P305, P337, P351: If in eyes, rinse cautiously with water for several minutes. If eye irritation persists: Seek medical advice.

P405: Store Locked up. 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 %
Dolomitic Limestone*	16389-88-1	45 - 50
Pendimethalin	40487-42-1	0.86%
Petroleum distillates light solvent	64742-47-8	0.1 - 0.5
Nonhazardous ingredients or fillers, and ingredients below reportable levels.	Various	Balance

*Note: Naturally mined minerals like limestone typically contain silica (sand) at amounts ranging from 1 to 6%. Fine silica particulates are considered as a carcinogen via repeated and prolonged inhalation over several years exposure.

4. FIRST AID MEASURES

Eye Contact	Rinse eyes with water. If discomfort or irritation persists contact a physician.
Skin Contact	Wash with soap and plenty of water. If injury occurs, or if discomfort or irritation persists contact a physician. If skin irritation or rash occurs: Get medical attention.
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.

If exposed or concerned: Get medical advice/attention.

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 irritation possible. Ingestion of significant amounts may color the urine red-orange. This is merely a dye effect, as pendimethalin is an aniline dye. Exposure to pendimethalin is NOT associated with methemoglobinemia.

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

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 gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures

Personal Precautions	Wear protective gloves and dust mask. 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: Avoid breathing dust. Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Do not eat, drink or smoke when using this product.

Storage Conditions: Store locked up. 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 IDLH*
Pendimethalin	10 mg/m ³ (TWA)	3 mg/m ³	-
Quartz silica	0.025 mg/m ³ (respirable)	(30 mg/m ³) ÷ (%SiO ₂ + 2)	3000 mg/m ³
Nuisance Dusts	10 mg/m ³ (TWA)	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 to prevent dust buildup in air.

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. Use gloves chemically resistant to Pendimethalin. Examples of preferred glove barrier materials include: Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"), Polyvinyl chloride ("PVC" or "vinyl").

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. Avoid contaminating leather items, such as shoes, belts and watch bands, as these cannot be cleared of chemical.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state Solid
 Appearance Granules
 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	No information available
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, although some ingredients may dissolve.
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

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 (NO_x), 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.
Sensitization	Caused skin sensitization in animal studies.
Germ cell mutagenicity	No mutagenic effect was found in various tests with microorganisms and mammals.
Carcinogenicity	Pendimethalin: Group 2B- Possible carcinogen effects at high does in animal studies, Potential occupational carcinogen. Naturally mined minerals, like limestone typically contain sand (silica) at amounts ranging from 1 to 6%. Fine silica particulates are considered to be carcinogenic via repeated and prolonged inhalation over several years exposure. (IARC, ACGIH).

Acute Toxicity by Ingestion (Pendimethalin)

- LD50, Rat 4,665 mg/kg

Dermal (Pendimethalin)

- LD50, Rat > 5,000 mg/kg Inhalation
- LC50, Aerosol, Rat > 26.92 mg/l (1 hr.)
- LC 50. Aerosol Rat >6.73 mg/l (4 hr.)

Skin Irritation (Pendimethalin):

- No skin irritation (rabbit)

Skin Sensitization (Pendimethalin)::

- Did not cause allergic skin reactions when tested on (guinea pig). Non-sensitizing.

Reproductive toxicity	No effect on animals tested
STOT - single exposure	No information available
STOT - repeated exposure	No information available
Chronic toxicity	Caused thyroid tumors in rats at high doses. No effect on mice.
Target Organ Effects	Caused thyroid tumors in rats at high doses. No effect on mice.
Aspiration hazard	No information available

12. ECOLOGICAL INFORMATION

Fertilizers may be harmful to aquatic life with short term effects, causing algal bloom and increased BOD, depending on the amount released.

The herbicide ingredients are toxic to aquatic invertebrates and to aquatic plants. 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	Will not bioaccumulate
Other adverse effects	No information available

Pedimethalin is very toxic to fish, aquatic organisms, aquatic invertebrates, and algae, toxic to birds and practically non-toxic to honeybees.

Pendimethalin Ecotoxicity:

- Rainbow Trout: 96Hr LC50 : 0.89 mg/L
- Bluegill sunfish, 96hr LC50: 0.2 mg/L
- Sheepshead minnow 96 hr. LC50 : .707 mg/l
- Daphnia magna, 48 hr. EC50 : 0.977 mg/L
- Mallard Duck, Oral LD50: 1,425 mg/kg
- Bobwhite Quail, LC50: 4,187 ppm
- Honeybee, 48 hr. Contact LD50 > 100 ug/bee

13. DISPOSAL CONSIDERATIONS

Disposal of wastes:

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:	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

General Product Information: This product is not federally regulated as a hazardous material.
Clean Air Act: No data
Clean Water Act: No data

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312
 Immediate (Acute) Health Hazard: Yes
 Delayed (Chronic) Health Hazard: Yes
 Fire Hazard: No
 Reactive Hazard: No
 Sudden Release of Pressure Hazard: N

TSCA STATUS: This product is exempt from TSCA Regulation under FIFRA Section 3(2)(G)(ii) when used as a pesticide.

CERCLA REPORTABLE QUANTITY:
 This product contains the following substances which are subject to the reporting requirements of CERCLA Section 103 and Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and which are listed in 40 CFR 372 and in 40 CFR 302.4.

Component	CAS#	RQ	Amount in Product	RQ this Formulation
Pendimethalin	4087-42-1	100 Lb	0.86%	11,628 Lb

State Right-to-Know: Crystalline silica: CA, IL, MA, NH, NY, NJ, PA, RI

California Proposition 65: This product may contain detectable quantities of a substance (sand mineral: silica) known to the State of California to cause cancer by prolonged, repeated inhalation over a long period of time (months to years).

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.