

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY**Product Name: **Lebanon Balan 2.5 HDG Granular (24-40764)**

EPA No: 961-268

Recommended use

This product is a granular 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:**

H315: Causes skin irritation. (Category 2)

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

H351: Suspected of causing cancer. (Category 2)

H332: Harmful if inhaled. (Category 4)

H319: Causes serious eye irritation. (Category 2A)

May irritate the digestive tract if ingested.

Precautionary Statements for handling:

P201: Obtain special instructions before use.

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

P261: Avoid breathing dust or spray mist.

P264: Wash hands and exposed skin thoroughly after handling.

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

P272: Contaminated work clothing should not be allowed out of the workplace.

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

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

P302, P332, 352: IF ON SKIN: Gently wash with plenty of soap and water. Seek medical attention if irritation occurs and persists.

P304, 340; P312: If inhaled, remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.

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

P308: If exposed or concerned, seek medical advice.

P333, 352: If skin irritation or rash occurs: Wash with plenty of soap and water. Seek medical attention if irritation persists.

P362, P363: Take off contaminated clothing and wash before reuse.

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

&lt;0.1% of the mixture consists of ingredients of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name   | CAS No.    | Weight % |
|---|------------|----------|
| N-butyl-N-ethyl- $\alpha$ , $\alpha$ , $\alpha$ -trifluoro-2,6-dinitro-p-toluidine<br>Synonyms: Benefin, Balan, Benfluralin | 1861-40-1  | 2.5%     |
| *Dolomitic limestone  | 16389-88-1 | 96%      |
| *Quartz silica (residual sand mineral in limestone)   | 14808-60-7 | >1.5%    |
| Non hazardous inert ingredients and fillers   | 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 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 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 irritation possible. Eye contact with Balan (benefin) may cause irritation with possible corneal injury. Effects may be delayed. Brief skin contact with Balan may cause moderate irritation with local redness. Prolonged or repeated skin contact may cause drying or flaking, but is not likely to result in absorption of harmful amounts. No adverse effects are anticipated from small amounts of Balan ingested or absorbed during normal handling. Prolonged excessive exposure to dust may be harmful if inhaled. In animal testing, repeated exposure to excessive doses has caused effects on the kidney, liver, and skin.

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, CO<sub>2</sub>, 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      | 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          | Use only outdoors or in a well-ventilated area. Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. Wash hands thoroughly after handling. |
| 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 oxidizers, acids or alkali, or other reactive substances.  |

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Exposure Guidelines

| Chemical Name              | ACGIH TLV                       | OSHA PEL   | NIOSH REL                      |
|----------------------------|---------------------------------|--|--------------------------------|
| Benefin, Balan (1861-40-1) | Not Established                 | Not Established  | Not Established                |
| Quartz silica              | 0.025 mg/m <sup>3</sup> (Resp.) | 30 mg/m <sup>3</sup> / (%SiO <sub>2</sub> +2)  | 0.05 mg/m <sup>3</sup> (Resp.) |
| Nuisance Dusts             | 10 mg/m <sup>3</sup> (TWA)      | 15 mg/m <sup>3</sup> (TWA total)<br>50 mppcf (TWA total)<br>5 mppcf (TWA respirable) | Not Established                |

\*REL refers to "Recommended Exposure Limit"

Engineering controls: Use with adequate ventilation to prevent dust buildup in air.

**Individual protection measures:** Wear protective gloves, protective clothing, eye protection, and face protection.

|                          |   |
|--------------------------|---|
| Eye protection           | Safety glasses, or goggles if eye contact is likely   |
| Skin and Body Protection | Wear protective gloves and coveralls.   |
| 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. Contaminated work clothing must not be allowed out of the workplace. Wash contaminated clothing before reuse.

### 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    |  |
| 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<sub>x</sub>), Ammonia, Oxides of sulfur, Hydrogen chloride and Carbon monoxide.

## 11. TOXICOLOGICAL INFORMATION

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

Benefin has a low toxicity if swallowed- Oral LD<sub>50</sub>, Rat, male and female: > 5,000 mg/kg

|                          |   |
|--------------------------|---|
| Symptoms                 | May irritate the digestive tract if ingested in quantity, causing nausea, vomiting and diarrhea. May irritate skin with prolonged contact. May cause an allergic skin reaction with itching, rash. Dust irritation with nasal discomfort, or skin irritation possible. Eye contact with benefin (Balan) may cause irritation with possible corneal injury. Effects may be delayed. Brief skin contact may cause moderate irritation with local redness. Prolonged or repeated skin contact may cause drying or flaking, but is not likely to result in absorption of harmful amounts. No adverse effects are anticipated from small amounts ingested or absorbed during normal handling. Prolonged excessive exposure to dust may be harmful if inhaled. In animal testing, repeated exposure to excessive doses has caused effects on the kidney, liver, and skin. |
| Sensitization            | Has caused allergic skin reactions when tested in guinea pigs.  |
| Germ cell mutagenicity   | No information available  |
| Carcinogenicity          | 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).   |
| Reproductive toxicity    | Not a reproductive toxin  |
| STOT - single exposure   | No information available  |
| STOT - repeated exposure | No information available  |
| Chronic toxicity         | Lungs: Silicosis; cancer.   |
| Target Organ Effects     | In animal testing, repeated exposure to excessive doses of Balan (benefin) has caused effects on the kidney, liver, and skin. Excessive repeated and prolonged inhalation of silica (quartz sand) can cause lung disease (silicosis) and eventually, cancer.  |
| Aspiration hazard        | No information available  |

## 12. ECOLOGICAL INFORMATION

Beneflin is very highly toxic to aquatic organisms (including fish and plants) on an acute basis (LC<sub>50</sub> or EC<sub>50</sub> <0.1 mg/L in the most sensitive species tested). 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 | The herbicide ingredient Balan (benefin) does not biodegrade readily.                   |
| Bioaccumulation               | Bioaccumulation potential of Balan (benefin) is moderate.                               |
| Other adverse effects         | Balan (benefin) is expected to be relatively immobile in soil (K <sub>oc</sub> > 5000). |

## 13. DISPOSAL CONSIDERATIONS

This material, as supplied is not a hazardous waste according to federal regulations (40 CFR 261).

**Disposal of wastes:** Do not contaminate water, food or feed by storage or disposal. Dispose of wastes at an approved waste disposal facility in accordance with label requirements and with all federal state, and local

regulations. Contact your state environmental office for information on approved waste disposal practices and facilities.

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**

|                       |                |              |               |
|-----------------------|----------------|--------------|---------------|
| <b>DOT:</b>           | Not Regulated  | <b>ADR:</b>  | Not Regulated |
| Proper Shipping Name: | Non Regulated  | <b>ADN:</b>  | Not Regulated |
| Hazard Class:         | Not Applicable | <b>RID:</b>  | Not Regulated |
| <b>IATA:</b>          | Not Regulated  | <b>IATA:</b> | Not Regulated |
| Proper Shipping Name: | Non Regulated  | <b>TDG:</b>  | Not Regulated |
| Hazard Class:         | Not Applicable | <b>ICAO:</b> | Not Regulated |
| <b>IMDG/IMO</b>       | Not Regulated  | <b>MEX:</b>  | 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

**CERCLA REPORTABLE QUANTITY:**

This product contains the following substance(s) listed as "Hazardous Substances" under CERCLA which may require reporting of releases:

| <u>Chemical Name</u> | <u>CAS Number</u> | <u>RQ</u> | <u>% in Product</u> |
|----------------------|-------------------|-----------|---------------------|
| None                 |                   |           |                     |

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

**SARA TITLE III:**

Section 302, Extremely Hazardous Substances: None

Section 311/312 Hazard Categories: Immediate Health Hazard. Delayed Health Hazard.

Section 313 Toxic Chemicals: Benfluralin (= Balan , Benefin)

**State Right-to-Know Components:**

Crystalline silica: CA, IL, MA, NH, NY, NJ, PA, RI

| <b>Component</b> | <b>CAS#</b> | <b>CA</b> | <b>MA</b> | <b>MN</b> | <b>NJ</b> | <b>PA</b> | <b>RI</b> |
|------------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Balan (benefin)  | 1861-40-1   | No        | No        | No        | No        | No        | No        |

Other state regulations may apply. Check individual state requirements.

**California Proposition 65:** This product contains detectable quantities of substances(quartz silica) known to the State of California to cause cancer.

**16. OTHER INFORMATION**

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.