# SAFETY DATA SHEET

**Issue Date** 23-Jan-2015 **Revision Date** 13-Mar-2015 **Version** 1

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier**
**Product Name** Gordon's LAUNCH®

**Other means of identification**
**Product Code** PBI FP 791-1

**Recommended use of the chemical and restrictions on use**
**Recommended Use** Fertilizers.
**Uses advised against** No information available.

**Details of the supplier of the safety data sheet**

| Supplier | Manufacturer | Company Name |
|---|---|---|
| PBI Gordon Corporation<br>1217 West 12th Street<br>Kansas City, MO 64101 | PBI Gordon Corporation<br>1217 West 12th Street<br>Kansas City, MO 64101 | PBI Gordon Corporation<br>1217 West 12th Street<br>Kansas City, MO 64101 |

**Emergency telephone number**
**Emergency Telephone** Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

**Classification**

**OSHA Regulatory Status**
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|---|---|
| Skin corrosion/irritation | Category 2 |

**Label elements**

**Emergency Overview**

**Warning**

**Hazard statements**
Causes skin irritation.

**Appearance** Liquid **Physical state** Liquid **Odor** No information available

**Precautionary Statements - Prevention**
• Keep container tightly closed
• Wear protective gloves/protective clothing/eye protection/face protection
• Wash face, hands and any exposed skin thoroughly after handling

**Precautionary Statements - Response**

• IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

**Precautionary Statements - Storage**
• Store in a well-ventilated place. Keep cool

**Precautionary Statements - Disposal**
• Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**
The low flash point of this product is due to a minor component in the mixture. Based on independent laboratory testing of similar products, this product would not sustain combustion as specified in DOT Regulation 49 CFR 173 Appendix H; however OSHA HCS 2012 flammable classifications are solely based on tested mixture flash points and boiling points.

**Other Information**

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No. | Weight-% |
|---|---|---|
| Potassium Citrate | 866-84-2 | 2.2 |
| Iron sulfate heptahydrate | 7782-63-0 | 1.8 |
| Sodium o-phenylphenol | 132-27-4 | 0.87 |
| Potassium hydroxide | 1310-58-3 | 0.3 |

* The exact percentage (concentration) of composition has been withheld as a trade secret

## 4. FIRST AID MEASURES

**First aid measures**

**General advice** In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

**Eye contact** Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists: Get medical advice/attention.

**Skin Contact** Wash off immediately with plenty of water.

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if irritation develops and persists.

**Ingestion** Do NOT induce vomiting. Call a poison control center or doctor for treatment advice.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** No information available.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**
Use. Foam. Carbon dioxide (CO2). Dry chemical. Water spray (fog).

**Specific hazards arising from the chemical**
No information available.

**Explosion data**

**Sensitivity to Mechanical Impact** None.
**Sensitivity to Static Discharge** None.

**Protective equipment and precautions for firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required.

**Environmental precautions**

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers. Soak up with inert absorbent material.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** Ensure adequate ventilation, especially in confined areas. Take precautionary measures against static discharges.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep tightly closed in a dry and cool place. Keep in properly labeled containers.

**Incompatible materials** Acids.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Exposure Guidelines**

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---|---|---|---|
| Iron sulfate heptahydrate<br>7782-63-0 | TWA: 1 mg/m³ Fe | (vacated) TWA: 1 mg/m³ Fe | TWA: 1 mg/m³ Fe |
| Potassium hydroxide<br>1310-58-3 | Ceiling: 2 mg/m³ | (vacated) Ceiling: 2 mg/m³ | Ceiling: 2 mg/m³ |

*NIOSH IDLH Immediately Dangerous to Life or Health*

**Other Information** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Appropriate engineering controls**

**Engineering Controls** The use of explosion-proof mechanical ventilation is recommended if this product is to be used in an enclosed area.

**Individual protection measures, such as personal protective equipment**

| | |
|---|---|
| **Eye/face protection** | Wear safety glasses with side shields (or goggles). |
| **Skin and body protection** | Wear protective gloves and protective clothing. |
| **Respiratory protection** | If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. |
| **General Hygiene Considerations** | When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

| | | | |
|---|---|---|---|
| **Physical state** | Liquid | | |
| **Appearance** | Liquid | **Odor** | No information available |
| **Color** | Black or Dark brown | **Odor threshold** | No information available |

| **Property** | **Values** | **Remarks • Method** |
|---|---|---|
| **pH** | 9.0-10.0 | |
| **Melting point/freezing point** | <35 °F | |
| **Boiling point / boiling range** | > 100 °C / 212 °F | |
| **Flash point** | 42 °C / 108 °F | |
| **Evaporation rate** | No information available | |
| **Flammability (solid, gas)** | No information available | |
| **Flammability Limit in Air** | | |
| **Upper flammability limit:** | No information available | |
| **Lower flammability limit:** | No information available | |
| **Vapor pressure** | <17 mm Hg | |
| **Vapor density** | No information available | |
| **Specific Gravity** | No information available | |
| **Water solubility** | Miscible 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** | No information available | |

**Other Information**

**Density** 8.88 pounds/gallon

## 10. STABILITY AND REACTIVITY

**Reactivity**
No data available

**Chemical stability**
Stable.

**Possibility of Hazardous Reactions**
None under normal processing.

**Hazardous polymerization**
Will not occur.

**Conditions to avoid**
Acids.

**Incompatible materials**
Acids.

**Hazardous Decomposition Products**
None known.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

**Product Information**

**Inhalation** No data available.

**Eye contact** No data available.

**Skin Contact** No data available.

**Ingestion** No data available.

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| Potassium hydroxide<br>1310-58-3 | = 214 mg/kg ( Rat ) | - | - |

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No information available.
**Germ cell mutagenicity** No information available.
**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|---|---|---|---|---|
| Sodium o-phenylphenol<br>132-27-4 | | Group 2B | | X |

*IARC (International Agency for Research on Cancer)*
*Group 2B - Possibly Carcinogenic to Humans*
*OSHA (Occupational Safety and Health Administration of the US Department of Labor)*
*X - Present*

**Reproductive toxicity** No information available.
**STOT - single exposure** No information available.
**STOT - repeated exposure** No information available.
**Chronic toxicity** May cause adverse liver effects.
**Target Organ Effects** Eyes, Gastrointestinal tract (GI), Liver, Respiratory system, Skin.
**Aspiration hazard** No information available.

**Numerical measures of toxicity - Product Information**

**Unknown Acute Toxicity** 11% of the mixture consists of ingredient(s) of unknown toxicity

**The following values are calculated based on chapter 3.1 of the GHS document**
**ATEmix (oral)** 24851 mg/kg

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

Harmful to aquatic life

11% of the mixture consists of components(s) of unknown hazards to the aquatic environment

| Chemical Name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|---|---|---|---|---|
| Potassium hydroxide 1310-58-3 | | 80: 96 h Gambusia affinis mg/L LC50 static | | |

**Persistence and degradability**
No information available.

**Bioaccumulation**
No information available.

**Other adverse effects**
No information available

## 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

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

**Contaminated packaging** Do not reuse container, unless specified by the manufacturer.

**US EPA Waste Number** D001 *See Section 2: Hazards not otherwise classified (HNOC)*

## 14. TRANSPORT INFORMATION

**DOT**

**Description** The following guidelines apply for domestic ground transport. If shipping by air or ocean, please contact our Transportation Dept.

FERTILIZERS NOI - NMFC #68140, SUB 6

In our current available sizes, this product does not qualify as a Hazardous Material.

## 15. REGULATORY INFORMATION

**U.S. EPA Label Information**
**EPA Pesticide Registration Number** Not Applicable

**International Inventories**

| | |
|---|---|
| **TSCA** | Not Listed |
| **DSL/NDSL** | 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/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

| Chemical Name | TSCA | DSL | NDSL | EINECS | ELINCS | ENCS | IECSC | KECL | PICCS | AICS |
|---|---|---|---|---|---|---|---|---|---|---|
| Potassium Citrate | X | X | | X | | X | X | X | X | X |
| Iron sulfate heptahydrate | | | | | | X | X | | X | X |
| Sodium o-phenylphenol | X | X | | X | | X | X | X | X | X |
| Potassium hydroxide | X | X | | X | | X | X | X | X | X |

## US Federal Regulations

### SARA 313

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

| Chemical Name | CAS No. | Weight-% | SARA 313 - Threshold Values % |
|---|---|---|---|
| Sodium o-phenylphenol - 132-27-4 | 132-27-4 | 0.87 | 0.1 |

### SARA 311/312 Hazard Categories

| | |
|---|---|
| **Acute health hazard** | Yes |
| **Chronic Health Hazard** | No |
| **Fire hazard** | Yes |
| **Sudden release of pressure hazard** | No |
| **Reactive Hazard** | No |

### CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---|---|---|---|---|
| Iron sulfate heptahydrate 7782-63-0 | | | | X |
| Potassium hydroxide 1310-58-3 | 1000 lb | | | X |

### CERCLA

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 | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|---|---|---|---|
| Iron sulfate heptahydrate 7782-63-0 | 1000 lb | | RQ 1000 lb final RQ<br>RQ 454 kg final RQ |
| Potassium hydroxide 1310-58-3 | 1000 lb | | RQ 1000 lb final RQ<br>RQ 454 kg final RQ |

## US State Regulations

### U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|---|---|---|---|
| Iron sulfate heptahydrate 7782-63-0 | | X | X |
| Sodium o-phenylphenol 132-27-4 | X | X | |
| Potassium hydroxide 1310-58-3 | X | X | X |

## International Regulations

**Mexico - Grade** Moderate risk, Grade 2

| Chemical Name | Carcinogenicity | Exposure Limits |
|---|---|---|

| | | |
|---|---|---|
| Iron sulfate heptahydrate | | Mexico: TWA 1 mg/m$^3$<br>Mexico: STEL 2 mg/m$^3$ |

## 16. OTHER INFORMATION

| | | | | |
|---|---|---|---|---|
| **NFPA** | **Health hazards** 0 | **Flammability** 1 | **Instability** 0 | **Physical and Chemical Properties** - |
| **HMIS** | **Health hazards** 0 | **Flammability** 1 | **Physical hazards** 0 | **Personal protection** X |

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**End of Safety Data Sheet**