

SAFETY DATA SHEET

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Version 3

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

Product identifier	
Product Name	
Other means of identif	icatio

Gordon's LAUNCH®

Other means of identification **Product Code** PBI FP 7911011 **Product Size** 55 U. S. Gal.

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 PBI Gordon Corporation 1217 West 12th Street Kansas City, MO 64101 Emergency telephone number **Emergency Telephone** Chemtrec 1-800-424-9300

Manufacturer PBI Gordon Corporation 1217 West 12th Street Kansas City, MO 64101

Company Name PBI Gordon Corporation 1217 West 12th Street Kansas City, MO 64101

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	Category 2
Carcinogenicity	Category 2
Flammable liquids	Category 3

Label elements

Emergency Overview

Warning		
Hazard statements Suspected of causing cancer. Causes skin irritation Flammable liquid and vapor.	ı.	
Appearance Liquid	Physical state Liquid	Odor No information available

Precautionary Statements - Prevention

- Obtain special instructions before use
- · Do not handle until all safety precautions have been read and understood
- · Use personal protective equipment as required

- Keep away from heat/sparks/open flames/hot surfaces. No smoking
- Keep container tightly closed

Precautionary Statements - Response

- · IF exposed or concerned: Get medical advice/attention
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

- Store locked up
- · 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. Number	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 contain	ment 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.		
7. HANDLING AND STORAGE			
Precautions for safe handling			

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.

against static discharges.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Advice on safe handling

Exposure Guidelines

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

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).

Ensure adequate ventilation, especially in confined areas. Take precautionary measures

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, su	ch 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 Appearance Color	Liquid Liquid Black or Dark brown	Odor Odor threshold	No information available No information available
Property pH Melting point/freezing point Boiling point / boiling range Flash point Evaporation rate Flammability (solid, gas) Flammability Limit in Air Upper flammability limit: Lower flammability limit: Vapor pressure Vapor density Specific Gravity Water solubility Solubility in other solvents Partition coefficient Autoignition temperature Decomposition temperature Oxidizing properties	Values9.0-10.0<35 °F> 100 °C / 212 °F42 °C / 108 °FNo information availableNo information available	<u>Remarks • Method</u>	
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
Sodium o-phenylphenol 132-27-4	= 1000 mg/kg (Rat)= 656 mg/kg (Rat)	-	-
Potassium hydroxide 1310-58-3	= 284 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 Germ cell mutagenicity Carcinogenicity	No informatio No informatio The table bel	n available.	agency has listed any ingre	edient as a carcinogen.
Chemical Name	ACGIH	IARC	NTP	OSHA
Sodium o-phenylphenol 132-27-4		Group 2B		Х
IARC (International Agency Group 2B - Possibly Carcinog OSHA (Occupational Safety X - Present	enic to Humans	of the US Department of Lai	bor)	
Reproductive toxicity STOT - single exposure STOT - repeated exposur Chronic toxicity Target Organ Effects Aspiration hazard	May cause a	n available. n available. dverse liver effects. intestinal tract (GI), Liver, I	Respiratory system, Skin.	
Numerical measures of t	oxicity - Product Informa	ation_		

Unknown Toxicity

9 % of the mixture consists of ingredient(s) of unknown toxicity

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

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life

96% 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		80: 96 h Gambusia affinis		
1310-58-3		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	Х	Х		Х		Х	Х	Х	Х	Х
Iron sulfate heptahydrate						Х	Х		Х	Х
Sodium o-phenylphenol	Х	Х		Х		Х	Х	Х	Х	Х
Potassium hydroxide	Х	Х		Х		Х	Х	Х	Х	Х

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	SARA 313 - Threshold Values %
Sodium o-phenylphenol - 132-27-4	0.1

SARA 311/312 Hazard Categories

Yes
No
Yes
No
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				Х
Potassium hydroxide 1310-58-3	1000 lb			Х

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	1000 lb		RQ 1000 lb final RQ
7782-63-0			RQ 454 kg final RQ
Potassium hydroxide	1000 lb		RQ 1000 lb final RQ
1310-58-3			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	Х
Sodium o-phenylphenol 132-27-4	Х	X	
Potassium hydroxide 1310-58-3	Х	X	Х

International Regulations

Mexico - Grade

Moderate risk, Grade 2

Chemical Name	Carcinogenicity	Exposure Limits
Iron sulfate heptahydrate		Mexico: TWA 1 mg/m ³
		Mexico: STEL 2 mg/m ³

16. OTHER INFORMATION						
<u>NFPA</u>	Health hazards 0	Flammability 1	Instability 0	Physical and Chemical Properties -		
HMIS	Health hazards 0	Flammability 1	Physical hazards 0	Personal protection X		

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of PBI Gordon Corporation's knowledge, information and belief at the date of this 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 other process, unless specified in the text. PBI GORDON CORPORATION MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. Given the variety of factors that can affect the use and application of this product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the product to determine whether it is fit for a particular purpose and suitable for user's method of use or application. Each user is also responsible for evaluating the conditions of use and designing the appropriate protective mechanisms to prevent employee exposures, property damage, or release to the environment. PBI Gordon Corporation assumes no responsibility for injury to the recipient or third persons, or for any damage to any property resulting from misuse of the product.

End of Safety Data Sheet