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Version 1

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

**Product identifier**

**Product Name** DIKEGULAC

**Other means of identification**

**Product Code** PBI FP 8150

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Growth regulator.

**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

**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

**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)

**Label elements**

**Emergency Overview**

**Warning**

**Appearance** Powder

**Physical state** Solid

**Odor** Acetone

**Hazards not otherwise classified (HNOC)**

**Other Information**

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%
2,3:4,6-Bis-O-(1-methylethylidene)alpha-L-xylo-2-h exulofuranosonic	18467-77-1	99

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

## 4. FIRST AID MEASURES

**First aid measures**

<b>Eye contact</b>	Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists: Get medical advice/attention.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water. Wash contaminated clothing before reuse. If skin irritation persists, call a physician.
<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration. If symptoms persist, call a physician.
<b>Ingestion</b>	Rinse mouth. Never give anything by mouth to an unconscious person. Call a poison control center or doctor for treatment advice.

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

<b>Symptoms</b>	No information available.
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**Indication of any immediate medical attention and special treatment needed**

<b>Note to physicians</b>	Treat symptomatically.
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**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

Use. Foam. Carbon dioxide (CO<sub>2</sub>). 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**

<b>Personal precautions</b>	Ensure adequate ventilation, especially in confined areas.
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**Environmental precautions**

<b>Environmental precautions</b>	See Section 12 for additional ecological information.
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**Methods and material for containment and cleaning up**

<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Use 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.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Keep out of the reach of children.

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

**Storage Conditions** Keep/store only in original container. Store contents under 32°F. Do not contaminate food or feed stuffs.

**Incompatible materials** Strong oxidizing or reducing agents. Decomposes under neutral to acidic conditions.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Exposure Guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

**Appropriate engineering controls**

**Engineering Controls** Ensure adequate ventilation, especially in confined areas.

**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. Wear long-sleeved shirt, long pants, socks and shoes.

**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** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<b>Physical state</b>	Solid	<b>Odor</b>	Acetone
<b>Appearance</b>	Powder	<b>Odor threshold</b>	No information available
<b>Color</b>	White to Yellow		

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
pH	Not Applicable	
Melting point/freezing point	300 °C / >572 °F	
Boiling point / boiling range	No information available	
Flash point	No information available	
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	No information available	
Vapor density	No information available	
Specific Gravity	No information available	
Water solubility	2 grams/liter	
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 No information available

**10. STABILITY AND REACTIVITY****Reactivity**

No data available

**Chemical stability**

Product slowly decomposes at room temperature to form acetone and 2-keto-L-gulonic acid.

**Possibility of Hazardous Reactions**

None under normal processing.

**Hazardous polymerization**

Will not occur.

**Conditions to avoid**

Strong oxidizing agents. Reducing agents. Acids.

**Incompatible materials**

Strong oxidizing or reducing agents. Decomposes under neutral to acidic conditions.

**Hazardous Decomposition Products**

Acetone.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Product Information**

Inhalation No data available.

Eye contact No data available.

Skin Contact See "Numerical measures of toxicity-product information" in this section.

Ingestion See "Numerical measures of toxicity-product information" in this section.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
2,3:4,6-Bis-O-(1-methylethylidene)alpha-L-xylo-2-hexulofuranosonic 18467-77-1	= 18000 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 No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

**Numerical measures of toxicity - Product Information**

Oral LD50 > 15000 mg/kg (rat)  
 Dermal LD50 > 12500 mg/kg mice

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Toxic to aquatic life with long lasting effects

0% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
2,3:4,6-Bis-O-(1-methylethylidene)alpha-L-xylo-2-hexulof uranosonic 18467-77-1	60: 96 h Chlorella vulgaris mg/L EC50	5000: 96 h Cyprinus carpio mg/L LC50 static 10000: 96 h Lepomis macrochirus mg/L LC50 static		10: 48 h Daphnia magna mg/L LC50

### 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** Disposal should be in accordance with applicable regional, national and local laws and regulations.

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

## 14. TRANSPORT INFORMATION

### DOT

#### Description

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

Inhibitors, Modifiers, or Regulators, Plant Growth - NMFC #101685

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	Listed
DSL/NDL	Listed
EINECS/ELINCS	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
2,3:4,6-Bis-O-(1-methylethylidene)alpha-L-xyllo-2-hexulof uranosonic	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 does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations****U.S. State Right-to-Know Regulations****International Regulations**

Mexico - Grade Minimum risk, Grade 0

**16. OTHER INFORMATION**

<b>NFPA</b>	Health hazards 0	Flammability 0	Instability 0	Physical and Chemical Properties -
<b>HMIS</b>	Health hazards 0	Flammability 0	Physical hazards 0	Personal protection X

**Disclaimer**

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**End of Safety Data Sheet**