



## SAFETY DATA SHEET

EMERGENCY CALL: 1-800-424-9300 (CHEMTREC)

### 1. IDENTIFICATION

**PRODUCT NAME:** Berati  
**DESCRIPTION:** Plant growth regulator  
**EPA REG. NO.:** 91234-225  
**COMPANY IDENTIFICATION:** Atticus, LLC  
940 NW Cary Parkway, Suite 200  
Cary, NC 27513

### 2. HAZARD IDENTIFICATION

#### WARNING

Suspected of damaging fertility of the unborn child (H361)



#### HAZARD CLASSIFICATION

Health Hazards	Category	Other Hazards	Category
Reproductive Toxicity	2	None	-
		Environmental Hazards	Category
		None	-

#### HAZARDS NOT REQUIRING CLASSIFICATION

Do not use or store near heat or open flame.

#### PRECAUTIONARY STATEMENTS

Obtain, read, and follow all safety instructions before use. Wear protective gloves/ protective clothing. (P203+P280+)

IF exposed or concerned, get medical advice. (P318)

Store Locked up. (P405)

Dispose of contents / container in accordance with local regulations. Refer to the product label for specific disposal instructions. (P501)

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Common Name	Chemical Name	CAS #	Composition
Paclobutrazol	1H-1,2,4-Triazole-1-ethanol, .beta.-[[4-chlorophenyl)methyl]-.alpha.-(1,1-dimethylethyl)-, (.alpha.R,.beta.R)-rel-	76738-62-0	0.4%
Propylene glycol	1,2-Propanediol	57-55-6	<10.0%
Attapulgate Clay	Palygorskite ([Mg(Al0.5-1Fe0-0.5)] Si4(OH)O10.4H2O)	12174-11-7	<1.1%

**NOTE:** Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

### 4. FIRST AID MEASURES

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency medical assistance, call SafetyCall®: **1-844-685-9173**. For chemical emergency: spill, leak, fire, exposure or accident, call CHEMTREC: **1-800-424-9300**.

### 5. FIREFIGHTING MEASURES

**Flash Point:** No data available.

**Fire and Explosion Hazards:** Do not use or store near heat or open flame.

**Extinguishing Medium:** Water fog, dry chemical, foam or carbon dioxide (CO<sub>2</sub>). If water is used to fight fire, dike and collect runoff.

**Fire Fighting Equipment:** Firefighters should be equipped with self-contained positive pressure breathing apparatus and full bunker gear.

**Fire Fighting Instructions:** Evacuate area of all unnecessary personnel and fight fire from a safe distance upwind. Contain contaminated water / firefighting water; do not allow to enter drains or waterways. Use foam or dry chemical fire extinguishing systems to prevent environmental damage from excessive water runoff. Decontaminate fire fighting gear and personal protective equipment before reuse.

**Hazardous Combustion Products:** During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

**NFPA Ratings:** Health – 1 / Flammability – 1 / Reactivity – 0

### 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Isolate area and keep unnecessary and unprotected personnel from entering. Wear suitable personal protective clothing and equipment as described in Section 8 of this document.

**Environmental Precautions:** Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

**Spill Cleanup:** Dike spill using suitable absorbent or impervious materials such as sand or clay. Collect and contain contaminated absorbent and place in an appropriate container for disposal. Pump any free liquid into an appropriate closed container and decontaminate tools and equipment following cleanup. Collect washings for disposal.

## 7. HANDLING AND STORAGE

**Handling:** Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

**Storage:** Store in a tightly closed container in a cool, dry place. Store in original container and out of reach of children, preferably in a locked storage area.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Control Parameters:

Chemical Name	OSHA PEL	ACGIH TLV	Other	Source
Paclobutrazol	Not Established	Not Established	10 mg/m <sup>3</sup> TWA	Syngenta
Propylene glycol	Not Established	Not Established	5.0 mg/m <sup>3</sup> TWA	AHA

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash station and a safety shower.

**Protective Clothing:** Applicators, and other handlers must wear a long-sleeved shirt and long pants, chemical resistant gloves made of any waterproof material (such as barrier laminate or butyl rubber or nitrile rubber or neoprene rubber or polyvinyl chloride or Viton®), and shoes plus socks.

**General:** Follow manufacturer's instructions for cleaning / maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	cloudy off-white liquid
<b>Odor:</b>	sweet
<b>Melting / Freezing Point:</b>	no data available
<b>Boiling Point / Range:</b>	no data available
<b>Flammability:</b>	no data available
<b>Flam. Limits (upper/lower):</b>	no data available
<b>Flash Point (cc):</b>	no data available
<b>Auto-Ignition Temp.:</b>	no data available
<b>Decomposition Temp.:</b>	no data available
<b>pH:</b>	8-9 (1% dispersion)
<b>Capillary Viscosity:</b>	no data available
<b>Solubility:</b>	no data available
<b>Density:</b>	8-9 lb/gal
<b>Partition Coefficient:</b>	no data available
<b>Vapor Pressure:</b>	no data available
<b>Particle Char.:</b>	no data available

## 10. STABILITY AND REACTIVITY

**CONDITIONS TO AVOID:** None known.

**CHEMICAL STABILITY:** Stable under normal use and storage conditions.

**INCOMPATIBILITY WITH OTHER MATERIALS:** None known.

**HAZARDOUS DECOMPOSITION PRODUCTS:** None known.

**HAZARDOUS POLYMERIZATION:** Will not occur.

## 11. TOXICOLOGICAL INFORMATION

**The following information is from a substantially similar product:**

**ORAL TOXICITY (rat LD<sub>50</sub>):** 5,346 mg/kg (EPA Category IV)

**DERMAL TOXICITY (rabbit LD<sub>50</sub>):** >2,000-5,000 mg/kg (EPA Category III)

**INHALATION TOXICITY (rat LC<sub>50</sub>):** > 2.0 mg/L (4-hour) (EPA Category IV)

**EYE IRRITATION:** Non-irritating (Rabbit)

**SKIN IRRITATION:** Non-irritating (Rabbit)

**SKIN SENSITIZATION:** Not a contact sensitizer (Guinea Pig)

### CARCINOGENICITY:

**EPA:** The Agency has not classified the carcinogenic potential (paclobutrazol)

**ACGIH:** TLV Established (Attapulgite Clay)

**IARC:** Group 2B (Attapulgite Clay)

**NTP:** Listed (Attapulgite Clay)

**OSHA:** PEL Established (Attapulgite Clay)

**MUTAGENIC TOXICITY:** Paclobutrazol was negative for any gene mutations.

**REPRODUCTIVE TOXICITY:** Dose-related increase in minor skeletal defects and evidence of fetotoxicity in rat studies (urogenital defects). No adverse effects seen on reproductive parameters or reproductive organs in a 2-generation rat study. Liver effects were noted at the highest dose level in the FO females and male and female offspring.

**NEUROTOXICITY:** No evidence of neurotoxicity from subacute or longer-term studies in mammals. No specific neurotoxicity studies have been conducted.

**CHRONIC TOXICITY:** Evidence of liver toxicity in repeat dose rodent studies at high dose levels. (1250 ppm, 90-day and 2-year tests). No effects noted in rabbit studies. Non-genotoxic in a range of in vitro and in vivo short-term tests. No indication that paclobutrazol is an endocrine disruptor.

## 12. ECOLOGICAL INFORMATION

This product is moderately toxic to aquatic organisms.

**Information presented below is from testing done with the active ingredient, paclobutrazol:**

Rainbow Trout (96-hour LC<sub>50</sub>): 27.8 mg/L; (NOAEC): 3.3 mg/L

Water Flea (48-hour LC<sub>50</sub>): 33.2 mg/L

Green Algae (96-hour EC<sub>50</sub>): 40.8 mg/L

### AVIAN TOXICITY

Mallard (Oral LD<sub>50</sub>): >7,900 mg/kg (body weight)

### HONEYBEE TOXICITY

Honeybee (Acute Oral NOEL): >0.002 mg/bee

## 13. DISPOSAL CONSIDERATIONS

**PESTICIDE DISPOSAL:** Pesticide spray mixture or rinsate that cannot be used should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:** Nonrefillable container. Do not reuse or refill this container. Refer to the product label for specific container disposal instructions.

## 14. TRANSPORT INFORMATION

### US-DOT:

Not regulated

### IMDG:

Not regulated

### IATA:

Shipped by air:

Not regulated

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

## 15. REGULATORY INFORMATION

### FIFRA –

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. The following is the hazard information as required on the pesticide label:

#### PRECAUTIONARY STATEMENTS

##### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION.** Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Wear a long-sleeved shirt and long pants, chemical resistant gloves made of (such as barrier laminate or butyl rubber or nitrile rubber or neoprene rubber or polyvinyl chloride or Viton®), and shoes plus socks. Remove and wash contaminated clothing before reuse.

##### ENVIRONMENTAL HAZARDS

For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

##### PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The regulatory information presented below is pertinent only when this product is handled outside of the normal use and application as a pesticide. This product is excluded from listing requirements under EPA/TSCA.

### SARA Title III – Section 302 Extremely Hazardous Substances

Not listed

### SARA Title III – Section 311/312 Hazard Categories

Not listed

### SARA Title III – Section 312 Threshold Planning Quantity

The threshold planning quantity (TPQ) for this product treated as a mixture is 10,000 lbs. This product contains no ingredients with a TPQ of less than 10,000 lbs.

### SARA Title III – Section 313 Reportable Ingredients

Not listed

### CERCLA Reportable Quantity (RQ) –

Not listed

### RCRA Code

Not applicable

### CALIFORNIA PROP 65 STATUS –



**WARNING:** This product can expose you to chemicals including palygorskite fibers, which is known to the State of California to cause cancer. For more information, go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

### CANADA –

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

## 16. OTHER INFORMATION

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA APPROVED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

To the extent consistent with applicable law, neither Atticus, LLC nor Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ATTICUS, LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF ATTICUS, LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

SDS Version: 1.0

Effective Date: 12/15/2021