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# Safety Data Sheet

**REVISION: 03** DATE: July 2020

# **Product Identifier**

#### **SECTION 1. IDENTIFICATION**

Product Identifier: **BIOBLAKR® - PBAT** 

Company: **Competitive Green Technologies** 

Emergency +1 519 329 2525 Telephone Number: +1 519 588 9395 +1 519 796 9323 +1 519 890 9165

Recommended Use: Injection molding consumer products

http://www.competitivegreentechnologies.com **Home Page:** 

#### **SECTION 2. HAZARD IDENTIFICATION**

Most important

hazards:

Not classified as hazardous

**Product effects** 

Adverse effects to the human health: In case of dust, Competitive Green Technologies suggests it to be treated as annoying dust or particulate, by international recommendations. Dust may

cause respiratory irritation if inhaled.

**Environmental** 

This resin meets biodegradation, eco-toxicity, and disintegration criteria per

effects:

ASTM D-6400 Standard

Physical and **Chemical hazards**  Not classified as physical hazards

Classification of the

substance or

mixture:

Not classified as hazardous

Label elements according to

regulation 1272:2008

(GHS) Symbol: Signal Word:

Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable

**Hazard Statement:** Precaution Statement:

Precaution Statement:

Label elements according to





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Directive 67/548/EEC Not applicable

Not classified

Symbol:

Not applicable

Risk Phrases: Safety Phrases

#### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No.	Concentration	Ingredients or impurities that contribute to the hazard
BIOBLAKR®	Proprietary Secrets	Up to 50%	Doesn't have ingredients or impurities that contribute to the hazard
Polybutylene adipate terephalate	60961-73-1	Up to 50%	classification

#### **SECTION 4. FIRST-AID MEASURES**

**Inhalation:** No risks concerning inhalation at room temperature. In case of inhalation of

dusts or vapors at high temperatures, remove victim to fresh air and keep in

rest. Seek medical attention. Take this SDS.

**Skin Contact:** No health risks concerning skin contact at room temperature. In case of

contact with the hot product and if irritation happens, wash with plenty of water. Remove clothing impregnated with the product. Seek medical attention.

Take this SDS.

**Eye Contact:** Wash with running water for at least 15 minutes, keeping the eyelids open.

Remove contact lenses if in use. Seek medical attention. Take this SDS.

**Ingestion:** Rinse the victim's mouth with plenty of water. DO NOT INDUCE VOMITING.

Seek medical attention. Take this SDS

Most Important Symptoms and

Effects, Acute and

Delayed:

Immediate Medical

Attention and Special Treatment:

Avoid contact with this product while helping the victim. Keep the victim in rest

In case of dust formation and inhalation, may cause coughing and sneezing.

and warm. Do not provide anything to an unconscious person. The

symptomatic treatment should include, above all, measured of support as correction of hydro electrolytic and metabolic disturbances and respiratory

care.

#### **SECTION 5. FIRE-FIGHTING MEASURES**

Fire Extinguishing

Media:

mixture:

Special hazards arising from the substance or

CO2, dry chemical, foam or water fog

When in a fire, may produce irritating and toxic gases like carbon monoxide

and dioxide





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Advice for Cool closed containers with pulverized water. Firefight at safe distance.

firefighters: Evacuate the safe area.

Use self-contained breathing apparatus (SCBA) operated in positive pressure

mode and complete protective clothing.

#### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal Precautions. **Protective** Equipment, and **Emergency Procedures** 

Control of dust: Not applicable. The product doesn't generate dust.

Product isn't flammable. Eliminate preventatively all the ignition sources Removal of ignition

sources: around the area. Do not smoke in the area.

**Provision of** Use in a well-ventilated area.

sufficient ventilation:

Prevention of Avoid contact with eyes. Use appropriate personal protective equipment.

inhalation and skin. mucous membranes and eye contact:

Environmental Do not let this chemical enter the environment (soil, waterways and

precautions: groundwater).

Do not dispose directly on the environment or the sewer. Methods and

Use a method that does not generate dust. Collect the material in proper material for

container and remove them to safe place. containment and

## **SECTION 7. HANDLING AND STORAGE**

Precautions for Safe Handle in a well-ventilated area or with a general system of local

Handling: ventilation/exhaustion. Avoid contact with eyes and clothing. Remove ignition

sources and heat. Do not smoke. Use exposure control measures and

personal protective equipment.

**Conditions for Safe** 

Storage:

cleaning up:

Keep the product in its original packaging and in a cool, dry, safe from direct sunlight and fireproof place. Keep the container tightly sealed and closed.

Keep away from food. Keep away from children.

Incompatibilities: fluorine, strong acids, strong oxidizers, chlorated solvents

and aromatic compounds.

Hygiene advice: Do not eat, drink, or smoke when using this product. Wash hands

**Packaging** before.

Materials:

The resin should be packaged in aluminum bags to prevent moisture

absorption and degradation.

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Rev. [3]





7 Seneca Rd, Leamington, Ontario, Canada N8H 5P2



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**Appropriate** 

**Engineering** Provide mechanical ventilation or direct exhaustion to the external media. It is **Controls:** recommended safety shower and eye bath available near work site. The

engineering controls measures are the most effective to reduce exposure to

the product.

Individual Protection

Measures

**Eye/Face** Safety goggles with lateral protection. Avoid using contact lenses while

Protection: handling this product.

Skin and Hand Suitable protective suit.

protection:

**Respiratory** Does not require specific respiratory equipment.

protection:

**Thermal hazard:** Complete air-ventilated suit, with air supply, or any thermo-resistant clothing

**Environmental** available.

**exposure controls:** Do not discharge directly in to the environment or in to the sewer system. The

dilution water from firefighting can cause pollution.

#### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance:** Black, solid, round or oval in shape.

Odour: None

Odour Threshold: Not applicable. PH: Not applicable. Melting Point and Not applicable.

Freezing Point:

**Initial Boiling Point** Not applicable.

and Boiling Range:

Flash Point: Not applicable.
Evaporation Rate: Not applicable.
Flammability (solid, Not applicable.

gas):

**Upper and Lower** Not applicable.

Flammability or

**Explosive Limit:** 

Vapour Pressure:Not applicable.Vapour DensityNot applicable.

(air = 1):

Relative Density

(water = 1): Solubility:

**Solubility:** Insoluble in water. Soluble in xylene.

Partition Coefficient, Not available.

n-Octanol / Water:

Auto-ignition >350°C

Temperature:

**Decomposition** >300°C

Temperature:

Viscosity

Explosive properties:

Oxidizing properties:

Not available.

Not available.





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**Other information:** Maximum time of storage is 24 months after production.

#### SECTION 10. STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions of handling and storage. Does not undergo

depolymerization.

Possibility of Hazardous

Reacts to violently with fluorine.

Reactions:
Conditions to Avoid:

High temperatures. Incompatible materials.

Incompatible Materials:

Fluorine, strong acids, strong oxidizers, chlorated solvents and aromatic

compounds.

Hazardous

Monoxide and carbon dioxide and other irritant chemical substances

Decomposition Products:

#### **SECTION 11. TOXICOLOGICAL INFORMATION**

#### **Likely Routes of Exposure**

**Acute Toxicity** 

**LD50 (oral):** Non-toxic product.

Skin Corrosion /

Not irritating.

Irritation:

Serious Eye Damage

Not irritating.

/ Irritation:

STOT (Specific

At powder or dust form, may cause respiratory irritation with coughing and

Target Organ sneezing.

Toxicity) - Single

**Exposure:** 

**Aspiration Hazard** 

There are not any known aspiration effects.

STOT (Specific

There are not any known repeated exposure effects.

Target Organ

Toxicity) - Repeated

Exposure:

Respiratory and/or

Epidemiological studies showed a very low skin sensitization potential.

Skin Sensitization:

**Carcinogenicity:** There are not any known carcinogenicity toxicity effects.

Germ Cell
Mutagenicit

There are not any known germ cell mutagenicity effects.

Mutagenicity:

**Reproductive** There are not any known reproductive toxicity effects.

Toxicity:



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#### **SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity:** There are not any known ecological toxicity values. Wildlife, especially small

fish may digest pellets. Pellets are not toxic, but may block the digestive tract

and cause starvation or death.

Persistence and Degradability:

High persistence is expected. Meets degradability of ASTM D-6400

Standard.

Bioaccumulative

It is expected moderate to high bio-accumulative potential

Potential:

Mobility in Soil: Results of PBT and Not available. Not available.

vPvB assessment:

### **SECTION 13. DISPOSAL CONSIDERATIONS**

Disposal Methods: Should be disposed as hazardous waste according to local legislations. The

treatment and disposal should be evaluated specifically to federal and

state/provincial laws.

#### **SECTION 14. TRANSPORT INFORMATION**

Land (Road/Rail): UN – "United Nations"

Recommendations on the TRANSPORT OF DANGEROUS GOODS. Model

Regulations

Waterways IMO – International Maritime Organization

(Sea/Inland): International Maritime Dangerous Goods Code (IMDG Code)

Air: IATA – International Air Transport Association

Dangerous Goods Regulation (DGR)

Environmental

Hazards:

Not Hazardous.

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code: Consult regulations:

- International Maritime Organization. MARPOL: Articles, protocols, annexes, unified interpretations of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating

thereto, consolidated edition. IMO, London, 2007.

- International Maritime Organization. IBC code: International code for the construction and equipment of shipping carrying dangerous chemicals in bulk; With Standards and guidelines relevant to the code. IMO, London, 2007.

#### SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations Labour Organization C170 Chemicals Convention, from June 25<sup>th</sup>, 1990:
 Occupational Safety and Health – Toxic Substances and Agents.

Commission Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the council on the registration, Evaluation, Authorization and Restriction of Chemicals (REACH).





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REACH – EGISTRATION, EVALUATION, AUTHORIZATION, AND RESTRICTION OF CHEMICALS. Commission Regulation (EC) No 1272/2008 of 16 December 2008, amending and repealing Directives 67/548/EEC and 1999/45/EC.

ECB – EUROPEAN CHEMICALS BUREAU. Directive 67/548/EEC (substances); Directive 1999/45/EC (preparations).

UN Recommendations on the TRANSPORT OF DANGEROUS GOODS. Model Regulations, 17<sup>th</sup> Edition, 2011.

TSCA – TOXIC SUBSTANCES CONTROL ACT of 1976. All components of this product are listed or exempted from the United States Environmental Protection Agency Toxic Substances Control Act inventory.

SARA 302/304 – No products were found.

SARA 311/312 - Fire Hazard

SARA 313 – This product contains no exceedance of chemical concentration that are subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

CALIFORNIA PROPOSITION 65 – This product complies with California Proposition 65.

CANADA – All components of this product are listed or exempted from DSL (Domestic Substances List).

EUROPE – Not known to contain substances of very high concern (SVHC). ROHS compliant

Restrictions: No Restrictions were found.

#### **SECTION 16. OTHER INFORMATION**

DISCLAIMER: Competitive Green Technologies warns that the handling of any chemical substance requires the previous knowledge of its hazards for the user. It is the responsibility of the user enterprise to promote the training of its employees and contractors about the possible risks arising from the product.

Food Contact Declaration:

Generally Recognized as Safe (GRAS) - substance is GRAS under the conditions of its intended use.

Given the biomass used in the preparation of the masterbatch, it is Competitive Green Technologies' belief that it is Animal Origin free and GMO free.

