

### 1. Product description

Product name: Greemas® 85102. A PLA-based blend composite.

### 2. Composition/Information on ingredients

Chemical Name	CAS#	Content
Polylactide	9051-89-2	> 85%
Styrene-Ethylene/Butylene-Styrene Block Copolymer	66070-58-4	< 10%
Talc	14807-96-9	< 5%

### 3. Possible hazards(Potential Health effects)

<b>Eye contact</b>	Contact with eyes may cause irritation.
<b>Skin contact</b>	Exposure to molten resin may cause thermal burns.
<b>Ingestion</b>	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
<b>Inhalation</b>	Dust and process vapors may cause respiratory tract irritation. Low hazard for usual industrial or commercial handling.

### 4. First aid measures

<b>Eye contact</b>	Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open. Get medical attention.
<b>Skin contact</b>	If molten material comes in contact with skin, cool under cold water or a running stream of water for at least 15 minutes. DO NOT attempt to remove the material from the skin. Removal could result in severe tissue damage. Get medical attention.
<b>Ingestion</b>	Drink water as a precaution. Get medical attention.
<b>Inhalation</b>	Move to fresh air and summon medical help if respiratory irritation develops or if breathing becomes difficult.

### 5. Accidental release measures

<b>Flash point</b>	None.
<b>Flammable limits</b>	Not applicable.
<b>Extinguishing media</b>	Use foam, carbon dioxide, or water spray when fighting fires involving this material.
<b>Hazardous decomposition products</b>	Burning produces obnoxious and toxic fumes, aldehydes, carbon monoxide and carbon dioxide.
<b>Fire fighting procedures-special</b>	Use self-contained breathing apparatus.

## 6. Accidental release measures

<b>Methods for cleaning up</b>	Vacuum or sweep up material and place in a disposal container.
<b>Personal precautions</b>	Pellets or powder remained on ground may cause slipping.
<b>Environmental precautions</b>	Keep pellets out of waterways.

## 7. Handling and storage

<b>General Procedures</b>	Keep away from heat, sparks and flame.
<b>Handling</b>	Prevent from fire around handling area. Maintain good housekeeping standards to prevent accumulation of dust. To avoid dust explosion resulting from the existence of powder, electrostatics eliminators and grounding should be fixed to such equipments as air transferring pipes, bag filters and hoppers.
<b>Storage</b>	Store in cool and dry place. Protect from direct sunlight, rain and violent temperature fluctuation. Fire is inhibited around storage area. No special restrictions on storage with other products.

## 8. Exposure controls and Personal protection

<b>Engineering controls</b>	Provide adequate local exhaust ventilation to exclude dust, fumes and gases.
<b>Personal protective equipment</b>	
✓ <b>Eye protection</b>	Wear safety glasses with side shields (or goggles).
✓ <b>Skin and hand protection</b>	When handling or processing resins at elevated temperatures or in a molten state, wear protective clothing over the skin to prevent contact. Wear suitable gloves.
✓ <b>Respiratory protection</b>	Respirator must be worn if exposed to dust or cleaning molding machine. For emergencies or instances when the exposure levels are not known, use a full-face piece positive-pressure, air-supplied respirator.

## 9. Physical and chemical properties

<b>Appearance</b>	White opaque pellets.
<b>Physical state</b>	Solid
<b>Odor</b>	Sweet
<b>Melting point</b>	Softening above 150 °C
<b>Specific gravity</b>	1.20 ~ 1.30
<b>Water solubility</b>	Insoluble

### 10. Stability and reactivity

<b>Stability</b>	Stable and non-reactive under normal handling and storage conditions.
<b>Condition to avoid</b>	Keep away from heat, Sparks and flame.
<b>Polymerization</b>	Product will not undergo polymerization.
<b>Hazardous decomposition products</b>	Burning produces obnoxious and toxic fumes, aldehydes, carbon monoxide and carbon dioxide.

### 11. Toxicological information

<b>Irritation</b>	Product dust and fumes or vapors generated from decomposing resin may be irritant to eyes, skin and respiratory tract.
<b>Acute toxicity</b>	There were no target organ effects noted following ingestion or dermal exposure in animal studies.
<b>Long term toxicity</b>	Did not cause skin allergic reactions in skin sensitization studies using guinea pigs.
<b>Mutagenic effects</b>	Not determined.
<b>Additional information</b>	
✓ <b>Skin</b>	LD50/dermal/rabbit > 2000 mg/Kg
✓ <b>Ingestion</b>	LD50/oral/rat > 5000 mg/Kg

### 12. Ecological information

<b>Mobility</b>	Not determined.
<b>Bioaccumulation</b>	Does not bioaccumulate. Inherently biodegradable.
<b>Ecotoxicity effects</b>	EC50/72hr/algae > 1100 mg/L

### 13. Disposal considerations

Controlled incineration or landfill according to local, state or national laws and regulations concerning health and pollution. Do not contaminate ditches, ponds or waterways with chemicals or used container.

### 14. Transport information

<b>DOT proper shipping name</b>	None.
<b>Hazard class</b>	Not regulated.
<b>DOT class</b>	None.
<b>DOT number</b>	None.
<b>IATA</b>	Not regulated.
<b>IMDG</b>	Not regulated.

### 15. Regulatory information

<b>RCRA status</b>	Not a hazardous waste under RCRA (40 CFR 261).
<b>CERCLA status</b>	Not listed.
<b>SARA/TITLE III - TOXIC CHEMICALS LIST</b>	This product does not contain a toxic chemical for routine annual toxic chemical release reporting under sec. 313 (40 CFR 372).

### 16. Other information

<b>Label information</b>	Greemas® Bio Plastics.
<b>Last revision date</b>	2012/4/13