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

1. Product identifier

Product name: PLA Neat resin

2. Relevant identified uses of the substance or mixture and uses advised against

Identifies uses: Plastics

Restriction on use: Pharmaceuticals, Medical device

3. Details of the supplier of the safety data sheet:

Supplier: Laboratorio Geométrico S.L.
Calle Segunda (Polígono Industrial El Montalvo III), 4,
37188, Carbajosa de la Sagrada
info@winkle.shop
670 37 88 29

4. Emergency telephone number

Emergency telephone numbers : 112

2. HAZARDS IDENTIFICATION

1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]: Not classified

Adverse physicochemical, human health and environmental effects
To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice

2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]: Not labelling applicable

3. Other hazards

Other hazards which do not result in classification : Warning. Potential dust explosion hazard.
Dust may form explosive mixture in air.
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance name	CAS No.	Concentratiopn (%)	Classification
Polylactide resin	(CAS-No.) 9051-89-2 (EC-No.) 618-575-7	99 - 100	Classification according to Regulation (EC) No. 1272/2008 [CLP]: Not classified

4. FIRST AID MEASURES

1. Description of first aid measures

Eye contact: Rinse eyes with water as a precaution

Skin contact: Wash skin with plenty of water

Ingestion: Call a poison center or a doctor if you feel unwell

Inhalation: Remove person to fresh air and keep comfortable for breathing

2. Most important symptoms and effects, both acute and delayed

Symptoms/effects: None known. Non-hazardous substance

3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. FIREFIGHTING MEASURES

1. Extinguishing media

Suitable extinguishing media: Call a poison center or a doctor if you feel unwell

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire

2. Special hazards arising from the substance or mixture

Explosion hazard: Dust can form an explosive mixture with air

Hazardous decomposition products in case of fire: Under fire conditions, hazardous fumes will be present: Carbon dioxide, Carbon monoxide, Acetaldehyde

3. Advice for firefighters

Explosion hazard: Evacuate personnel to a safe area. Use water spray or fog for cooling exposed containers. Move containers from fire area if it can be done without personal risk. Prevent fire fighting water from entering the environment

Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing

6. ACCIDENTAL RELEASE MEASURES

1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment. Emergency procedures : Evacuate unnecessary personnel. Ventilate spillage area. Avoid dust formation. Avoid contact with skin and eyes. Do not touch or walk on the spilled product. Do not breathe dust. Measures in case of dust release : No flames, no sparks. Eliminate all sources of ignition

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection"

2. Environmental Precautions

Avoid release to the environment

3. Methods and material for containment and cleaning up

For containment : Stop leak without risks if possible. Avoid creating or spreading dust. Methods for cleaning up : Avoid dust formation. Shovel or sweep up and put in a closed container for disposal. Flush contaminated areas with plenty of water. Use non-sparking tools. Never return spills in original containers for possible later re-use. Other information : Dispose of materials or solid residues at an authorized site

4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13

7. HANDLING AND STORAGE

1. Precautions for safe handling

Additional hazards when processed: Dust may form flammable and explosive mixture with air
Precautions for safe handling: Handle under inert gas. Protect from moisture. Wear personal protective equipment. Avoid contact with skin and eyes. Ensure good ventilation of the work station. Keep only in original container. Do not handle until all safety precautions have been read and understood
Handling temperature: < 50 °C
Hygiene measures: Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Use good housekeeping practices during storage, transfer, handling, to avoid excessive dust accumulation. Wash contaminated clothing before reuse. Avoid contact with skin, eyes and clothing. Do not breathe dust

2. Conditions for safe storage, including any incompabilities

Storage conditions : Keep container tightly closed in a cool, well-ventilated place. Protect from moisture. Incompatible materials : Water, humidity. Storage temperature : < 50 °C. Storage area : Store according to local legislation.

3. Specific end use(s) recommendations

No additional information available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

1. Control parameters

National occupational exposure and biological limit values:
No additional information available

Recommended monitoring procedures:
No additional information available

Air contaminants formed:
No additional information available

DNEL and PNEC:
Additional information : Contains no substances with occupational exposure limits

Control banding:
No additional information available

2. Exposure controls

Appropriate engineering controls:
Appropriate engineering controls: Ensure good ventilation of the work station. Assess the risk of potentially explosive atmospheres and the need for explosion-proof equipment

Eye and face protection:
Safety glasses with side shields. Field of application: Dust. Standard EN 166.

Hand protection:
Protective gloves. Material: Butyl rubber. Permeation 6(>480 minutes). Thickness(mm): 0.5. Standard: EN 347.

Respiratory protection:
No respiratory protection needed under normal use conditions. Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Device: Dust mask. Filter type: (FFP2). Condition: Dust protection. Standard: EN 149.

Thermal hazards:
No additional information available

3. Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment

Other information:
Handle in accordance with good industrial hygiene and safety procedures. Always wash hands after handling the product. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes and clothing. Use good housekeeping practices during storage, transfer, handling, to avoid excessive dust accumulation. Wash contaminated clothing before reuse. Do not breathe dust

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Solid
Colour:	White. Opaque
Appearance:	Pellet
Odour:	Odourless

Odour threshold:	Not available
Melting point:	150 - 230°C
Freezing point:	Not applicable
Boiling point:	Not available
Flammability:	Not flammable
Explosive limits:	Not applicable
Lower explosive limit (LEL):	Not applicable
Upper explosive limit (UEL):	Not applicable
Flash point:	Not applicable
Auto-ignition temperature:	Not applicable
Decomposition temperature:	>230°C
pH:	Not available
pH solution:	Not available
Viscosity, kinematic:	Not applicable
Solubility:	Insoluble in water
Partition coefficient n-octanol/water (Log Kow):	Not available
Vapour pressure:	Not available
Vapour pressure at 50°C:	Not available
Density:	1.2 - 1.3 g/cm³
Relative density:	Not available
Relative vapour density 20°C:	Not applicable
Particle size:	Not available
Particle size distribution:	Not available
Particle shape:	Not available
Particle aspect ratio:	Not available
Particle aggregation state:	Not available
Particle aglomeration state:	Not available
Particle specific surface area:	Not available
Particle dustiness:	Not available

Other information:
No additional information available

10. STABILITY AND REACTIVITY

1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport

2. Chemical stability

Stable under normal conditions

3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Hazardous polymerisation: Will not occur. When mixed with air and exposed to an ignition source, dust may burn in the open air or explode if confined

4. Conditions to avoid

Above a temperature of: 230°C / 446 °F. Protect from moisture. Avoid raising powdered materials into airborne dust, creating an explosion hazard

5. Incompatible materials

Water, humidity

6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced

11. TOXICOLOGICAL INFORMATION

1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified
Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

2. Information on other hazards

No additional information available

12. ECOLOGICAL INFORMATION

1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic): Not classified

2. Persistence and degradability

Hydrolyses in hot water. The hydrolysis product is readily biologically degradable. Compostable and biodegradable according to EN 13432, ASTM D6400 and ISO 17088. Decomposes in contact with (hot) water. The hydrolysis product is S-lactic acid which is readily biodegradable

3. Bioaccumulative potential

No additional information available

4. Mobility in soil Soil

No additional information available

5. Results of PBT and vPvB assessment

Luminy PLA Neat resin (9051-89-2) - This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII. This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

6. Endocrine disrupting properties

No additional information available

7. Other adverse effects

No additional information available

13. DISPOSAL CONSIDERATIONS

Regional legislation (waste) : Dispose in a safe manner in accordance with local/national regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not re-use empty containers without proper cleaning or reconditioning

14. TRANSPORT INFORMATION

1. UN number

Not regulated

2. UN Proper shipping name

Not regulated

3. Transport hazards classes

Not regulated

4. Packaging group

Not regulated

5. Environmental hazards

Not regulated

6. Special precautions for user

Overland transport
Not regulated
Transport by sea
Not regulated
Air transport
Not regulated
Inland waterway transport
Not regulated
Rail transport
Not regulated

7. Maritime transport in bulk according to IMO instruments

Not applicable

15. REGULATORY INFORMATION

1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU-Regulations

No REACH Annex XVII restrictions. Luminy PLA Neat resin is not on the REACH Candidate List Luminy PLA Neat resin is not on the REACH Annex XIV List. Luminy PLA Neat resin is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 july 2012 concerning the export and import of hazardous chemicals. Luminy PLA Neat resin is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Other information, restriction and prohibition regulations: No registration number is given for this substance because it is a polymer exempted from registration according to the provisions of Article 2(9) of REACH. Assess the risk of potentially explosive atmospheres and the need for explosion-proof equipment in accordance with ATEX directives

2. National regulations

Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on the Canadian DSL (Domestic Substances List)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on the NCI (National Chemicals Inventory)

3. Chemical Safety Assessment

No chemical safety assessment has been carried out

16. OTHER INFORMATION

1. Indication of changes

SDS EU format according to COMMISSION REGULATION (EU) 2020/878. Trade name. Address

2. Further information

NOAEL No-Observed Adverse Effect Level
ADR European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ATE Acute Toxicity Estimate
BCF Bioconcentration factor
CLP Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DOT Department of Transportation (DOT)
DNEL Derived-No Effect Level
DMEL Derived Minimal Effect level
EC50 Median effective concentration

IARC International Agency for Research on Cancer
IATA International Air Transport Association
IMDG International Maritime Dangerous Goods
LC50 Median lethal concentration
vPvB Very Persistent and Very Bioaccumulative
TLM Median Tolerance Limit
STP Sewage treatment plant
SDS Safety Data Sheet
REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
PNEC Predicted No-Effect Concentration
PBT Persistent Bioaccumulative Toxic
NOEC No-Observed Effect Concentration
OECD Organisation for Economic Co-operation and Development

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its 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 process, unless specified in the text. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist