

Safety Data Sheet

Luminy PLA Neat resin

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Revision date: 12/12/2025 Supersedes version of: 2/3/2025 Version: 7.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form	: Substance
Name	: Luminy PLA Neat resin
Trade name	: Luminy® L105 Luminy® L130 Luminy® L175 Luminy® LX105 Luminy® LX175 Luminy® LX530 Luminy® LX575 Luminy® LX930 Luminy® LX975 Luminy® Development Grade Luminy® TGR1 Luminy® TGR2 Luminy® LX930 CS1 Luminy® L040 This SDS covers Luminy® PLA L-grades with the suffix BMB and RMB.
EC-No.	: 618-575-7
CAS-No.	: 9051-89-2
REACH registration No.	: 01-2119489904-22-0002, 01-2121029453-60-0001 (monomer)
REACH authorisation exemptions	: Exempted from REACH registration Polymer

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

1.2.1. Relevant identified uses

Main use category	: Industrial use
Use of the substance/mixture	: Plastics Food contact materials

1.2.2. Uses advised against:

Restrictions on use	: Pharmaceuticals, Medical device
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1.3. Details of the supplier of the safety data sheet

Manufacturer

TotalEnergies Corbion BV
Stadhuisplein 70
4203 NS Gorinchem - The Netherlands
T +31 183 695 695
pla@totalenergies-corbion.com

1.4. Emergency telephone number

Emergency number	: +44 1865 407333 (CareChem24) Operating hours 24 hours, 7 days a week
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SECTION 2: Hazards identification

2.1. 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.

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2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable

2.3. Other hazards

Other hazards which do not result in classification : Warning. Potential dust explosion hazard. Dust may form explosive mixture in air. The synthetic polymer microparticles supplied are subject to conditions laid down by entry 78 of Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council.

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

The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Polymer
Name : Luminy PLA Neat resin
CAS-No. : 9051-89-2
EC-No. : 618-575-7

Name	Product identifier	Conc. (% w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Poly lactide resin	(CAS-No.) 9051-89-2 (EC-No.) 618-575-7	99 – 100	Not classified

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects : None known. Non-hazardous substance.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Foam. Dry powder.
Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Fire hazard : No fire hazard.

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- Explosion hazard : Dust may form explosive mixture in air.
- Hazardous decomposition products in case of fire : Under fire conditions, hazardous fumes will be present: Carbon dioxide, Carbon monoxide, Acetaldehyde.

5.3. Advice for firefighters

- Precautionary measures fire : This product is a Synthetic Polymer Microparticle (SPM). Discharge into the environment must be avoided. Collect contaminated extinguishing water separately and must not enter the sewage system. Run-off must undergo physico-chemical treatment prior to disposal.
- Firefighting instructions : 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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Notify authorities if product enters sewers or public waters. No flames, no sparks. Eliminate all sources of ignition.

6.1.1. 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.

6.1.2. 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".
- Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

This product is a Synthetic Polymer Microparticle (SPM). Discharge into the environment must be avoided. Notify authorities if product enters sewers or public waters.

6.3. 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 : Minimise generation of dust. Use non-sparking tools. Use wet cleaning techniques or vacuum cleaners with HEPA H13 filters (or better) for removal of dust. Do not allow product to reach the sewage system. Never return spills in original containers for possible later re-use. Train personnel on the risks of leakage and proper cleanup procedures.
- Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. 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. Clean up thoroughly after use. Ensure good ventilation of the work station. Keep only in original container. Use wet cleaning techniques or vacuum cleaners with HEPA H13 filters (or better) for removal of dust. Do not pour product down the drain.
- Handling temperature : < 50 °C

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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.

7.2. Conditions for safe storage, including any incompatibilities

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.
Packaging materials : Always store product in container of same material as original container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

Additional information : Contains no substances with occupational exposure limits

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. 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. Minimise exposure using measures such as closed systems, dedicated facilities and suitable general/local exhaust ventilation. Filter exhaust air through a HEPA H13 filter (or better). Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure that flushing water does not enter sewers or watercourses. Run-off must undergo physico-chemical treatment prior to disposal. Do not exceed the occupational exposure limits (OEL). Equip all water drainage points with filters or sieves to capture granules.

8.2.2. Personal protection equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:			
Safety glasses with side shields			
Type	Field of application	Characteristics	Standard
Safety glasses with side shields	Dust		EN ISO 16321-1

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8.2.2.2. Skin protection

Skin and body protection:	
Long sleeved protective clothing	
Type	Standard
Long sleeved protective clothing	EN ISO 13982

Hand protection:					
Protective gloves					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Protective gloves	Butyl rubber	6 (> 480 minutes)	0.5		EN 374

8.2.2.3. Respiratory protection

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

8.2.2.4. Thermal hazards

No additional information available

8.2.3. 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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: White. Opaque.
Appearance	: Pellet.
Odour	: Odourless.
Odour threshold	: Not available
Melting point	: 130 – 230 °C
Freezing point	: Not applicable
Boiling point	: Not available
Flammability	: Non flammable, Test method UN Test N.1
Lower explosion limit	: Not applicable
Upper explosion limit	: 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.

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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/cm ³
Relative density	: Not available
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable under normal conditions.

10.3. 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.

10.4. 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.

10.5. Incompatible materials

Water, humidity.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. 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

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Viscosity, kinematic	Not applicable
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11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : Contains no substances identified as having endocrine disrupting properties

11.2.2 Other information

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. There are increasing concerns about the presence of microplastics in different environment compartments (such as water), and their potential effects on the environment, biodiversity, and human health.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

12.2. Persistence and degradability

Luminy PLA Neat resin (9051-89-2)

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.

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. 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

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : Contains no substances identified as having endocrine disrupting properties

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation : 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. Store waste in properly labelled container. Use separate containers for recyclable waste and non-recyclable pellets, flakes and powder.
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.
Ecological waste information : Avoid release to the environment.

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SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

14.6. Special precautions for user

Special transport precautions

: Minimize airborne dust generation and prevent wind dispersal during loading and unloading. Use leak-proof containers for transporting waste. Clean transport vehicles after loading/unloading to prevent loss on public roads.

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

Other information, restriction and prohibition regulations

: For more information on food contact, please refer to the latest food contact compliance statement by TotalEnergies Corbion. 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.

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
78.	Luminy PLA Neat resin	Synthetic polymer microparticles according to the criteria for Annex XVII entry 78

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REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (2024/590)

Not listed on the Ozone Depletion list (Regulation EU 2024/590)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

Explosives Precursors Regulation (EU 2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (EC 273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

National regulations

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

Listed on the Canadian DSL (Domestic Substances List)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

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 (Vietnam - National Chemical Inventory)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

Added. Exposure controls/personal protection. Accidental release measures. Handling and storage. Section 15: Regulatory information.

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association

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IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
NOEC	No-Observed Effect Concentration
NOAEL	No-Observed Adverse Effect Level
OECD	Organisation for Economic Co-operation and Development
PNEC	Predicted No-Effect Concentration
PBT	Persistent Bioaccumulative Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
STP	Sewage treatment plant
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative

- Training advice : Ensure staff are informed of and trained on the nature of exposure and basic actions to minimise exposure. Training staff on good practice.
- Other information : This SDS covers Luminy® PLA L-grades with the suffix BMB and RMB.
Luminy® PLA BMB products are PLA grades where the principles of mass balance have been applied with respect to Bonsucro chain-of-custody certification.
Luminy® PLA RMB products are PLA grades where the principles of mass balance have been applied to allocate the recycled PLA content in the products.

TotalEnergies Corbion SDS EU (REACH Annex II)

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