

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Revision date: 12/10/2022 Supersedes version of: 22/04/2021 Version: 6.1

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

1.1. Product identifier

Product form : Substance

Name : Luminy PDLA Neat resin

: Luminy® D070 Trade name

Luminy® D105 Luminy® D120 Luminy® D130

EC-No. : 618-575-7 : 9051-89-2 CAS-No.

REACH registration No : 01-2119516231-55-0002 (monomer)

Type of product : Polymers

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Plastic

1.2.2. Uses advised against:

Restrictions on use : Pharmaceuticals. Medical device

1.3. Details of the supplier of the safety data sheet

TotalEnergies Corbion BV Stadhuisplein 70 4203 NS Gorinchem - The Netherlands T +31 183 695 695 - F +31 183 695 600 pla@totalenergies-corbion.com

1.4. Emergency telephone number

Emergency number : +44 1865 407333 (CareChem24)

Operating hours 24 hours, 7 days a week

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.

2.2. Label elements

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

No labelling applicable

2.3. Other hazards

: Warning. Potential dust explosion hazard. Dust may form explosive mixture in air. Other hazards which do not result in classification

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

SECTION 3: Composition/information on ingredients

3.1. Substances

Commission Regulation (EU) 2018/605

Substance type : Polymer

Name : Luminy PDLA 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]
Polylactide resin	(CAS-No.) 9051-89-2 (EC-No.) 618-575-7	> 99	Not classified

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

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

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

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.



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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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".

6.2. Environmental precautions

Avoid release to the environment

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 : 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.

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. Ensure good ventilation of the work station. Keep only in original

container

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.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

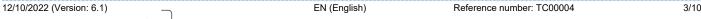
8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available





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ccording to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):







8.2.2.1. Eye and face protection

Eye protection:			
Safety glasses with side shields			
Туре	Field of application	Characteristics	Standard
Safety glasses with side shields	Dust		EN 166

8.2.2.2. Skin protection

Skin and body protection:		
Long sleeved protective clothing		
Туре	Standard	
Long sleeved protective clothing		

Hand protection:					
Protective gloves					
Туре	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

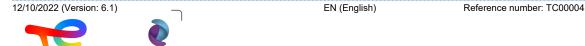
Device	Filter type	Condition	Standard
Dust mask	(FFP2)	Dust protection	EN 149

8.2.2.4. Thermal hazards

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No additional information available

Corbion







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. Do not breathe dust.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Colour

: White. Opaque. Appearance : Pellet. Odour Odourless. Odour threshold : Not available Melting point : 150 - 230 °C Freezing point : Not applicable : Not available Boiling point : Non flammable. Flammability : Not explosive. Explosive properties : Not applicable **Explosive limits** Lower explosion limit : Not applicable Upper explosion limit : Not applicable Flash point Not applicable Not applicable Auto-ignition temperature Decomposition temperature > 230 °C рΗ 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 : Not available

Vapour pressure at 50 °C Density : 1.2 - 1.3 g/cm³ Relative density : Not available : Not applicable Relative vapour density at 20 °C Particle size : Not available Particle size distribution : Not available : Not available Particle shape : Not available Particle aspect ratio : Not available Particle aggregation state Particle agglomeration state : Not available Particle specific surface area : Not available Particle dustiness : Not available

9.2. Other information

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9.2.1. Information with regard to physical hazard classes

Corbion

No additional information available

9.2.2. Other safety characteristics

Dust deflagration index : Not applicable





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

Luminy PDLA Neat resin (9051-89-2)

Viscosity, kinematic Not applicable

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

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

Hazardous to the aquatic environment, short-term

(acute)

Hazardous to the aquatic environment, long–term : No

(chronic)

Not rapidly degradable

: Not classified

: Not classified

12.2. Persistence and degradability

Luminy PDLA Neat resin (9051-89-2)		
,	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 PDLA 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 legislation (waste)

: Dispose in a safe manner in accordance with local/national regulations.

Waste treatment methods

 $: \ \, \text{Dispose of contents/container in accordance with licensed collector's sorting instructions}.$

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.

SECTION 14: Transport information

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

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ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID n	umber			
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shippin	g 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

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

15.1.1. EU-Regulations

Not listed on REACH Annex XVII

Not listed on the REACH Candidate List

Not listed on REACH Annex XIV (Authorisation List)

Not listed on the PIC list (Regulation EU 649/2012)

Not listed on the POP list (Regulation EU 2019/1021)

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.

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15.1.2. 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:	
Address. Logo.	

Abbreviations and acronyms:	
IATA	International Air Transport Association
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
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
DOT	Department of Transportation (DOT)
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
РВТ	Persistent Bioaccumulative Toxic

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vPvB	Very Persistent and Very Bioaccumulative
STP	Sewage treatment plant
SDS	Safety Data Sheet
PNEC	Predicted No-Effect Concentration
TLM	Median Tolerance Limit

Training advice

: Ensure staff are informed of and trained on the nature of exposure and basic actions to minimise exposure.

TotalEnergies Corbion SDS EU (REACH Annex II)

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