

## PLA 3100

Version number: 1.0

### SECTION 1: Identification

#### 1.1 Product identifier

**Trade name** PLA 3100  
**CAS number** not relevant (mixture)

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

**Relevant identified uses** Filament

#### 1.3 Details of the supplier of the safety data sheet

Jabil Inc. Telephone: +1 651-202-6058  
 102 N Jonathan Blvd  
 Chaska, Minnesota, MN 55318  
 United States

**e-mail (competent person)** GHS@crc-us.com

#### 1.4 Emergency telephone number

Poison center		
Country	Name	Telephone
-	CHEMTREC (International)	+1 202-483-7616
United States	CHEMTREC USA	(800) 424-9300

As above or next toxicological information centre.

### SECTION 2: Hazard(s) identification

#### 2.1 Classification of the substance or mixture

**Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)**

This mixture does not meet the criteria for classification.

#### 2.2 Label elements

**Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)**

Not required.

## 2.3 Other hazards

### Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Not relevant (mixture).

### 3.2 Mixtures

#### Description of the mixture.

≥ 95 % polylactide

≤ 5 % additives.

The specific exact percentage (concentration) of composition has been withheld as a trade secret.

## SECTION 4: First-aid measures

### 4.1 Description of first-aid measures

#### General notes

In all cases of doubt, or when symptoms persist, seek medical advice.

#### Following inhalation

Provide fresh air.

#### Following skin contact

Rinse skin with water/shower.

Call a physician immediately. After contact with the molten product, cool rapidly with cold water.

Do not pull solidified product away from the skin.

#### Following eye contact

Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical advice/attention.

#### Following ingestion

Rinse mouth. Do not induce vomiting.

Get medical advice/attention.

#### Notes for the doctor

None.

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

These information are not available.

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

None.

**SECTION 5: Fire-fighting measures**

**5.1 Extinguishing media**

**Suitable extinguishing media**

water, foam, alcohol resistant foam, fire extinguishing powder

**Unsuitable extinguishing media**

water jet

**5.2 Special hazards arising from the substance or mixture**

Hazardous decomposition products: Section 10.

Deposited combustible dust has considerable explosion potential.

**Hazardous combustion products**

carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>)

**5.3 Advice for firefighters**

In case of fire and/or explosion do not breathe fumes.

Coordinate firefighting measures to the fire surroundings.

Do not allow firefighting water to enter drains or water courses.

Collect contaminated firefighting water separately.

Fight fire with normal precautions from a reasonable distance.

**Special protective equipment for firefighters**

self-contained breathing apparatus (SCBA)

**SECTION 6: Accidental release measures**

**6.1 Personal precautions, protective equipment and emergency procedures**

**For non-emergency personnel**

Ventilate affected area.

Control of dust.

Eliminate all ignition sources if safe to do so.

Do not breathe dust.

Do not get in eyes, on skin, or on clothing.

Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing.

**For emergency responders**

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

**6.2 Environmental precautions**

Keep away from drains, surface and ground water.

Retain contaminated washing water and dispose of it.

If substance has entered a water course or sewer, inform the responsible authority.

## 6.3 Methods and material for containment and cleaning up

### Advice on how to contain a spill

Take up mechanically.

### Advice on how to clean up a spill

Take up mechanically.

Collect spillage.

### Other information relating to spills and releases

Place in appropriate containers for disposal.

Ventilate affected area.

## 6.4 Reference to other sections

Hazardous combustion products: see section 5.

Personal protective equipment: see section 8.

Incompatible materials: see section 10.

Disposal considerations: see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation.

Keep away from sources of ignition - No smoking.

#### Specific notes/details

Dust deposits may accumulate on all deposition surfaces in a technical room.

#### Measures to protect the environment

Avoid release to the environment.

#### Advice on general occupational hygiene

Do not eat, drink and smoke in work areas.

Remove contaminated clothing and protective equipment before entering eating areas.

Do not breathe dust.

Do not get in eyes, on skin, or on clothing.

Wash hands thoroughly after handling.

Preventive skin protection (barrier creams/ointments) is recommended.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Explosive atmospheres

Removal of dust deposits.

#### Flammability hazards

Keep away from sources of ignition - No smoking.

#### Incompatible substances or mixtures

Incompatible materials: see section 10.

**Protect against external exposure, such as**

heat

**Consideration of other advice**

Keep away from food, drink and animal feedingstuffs.

**Ventilation requirements**

Provision of sufficient ventilation.

**Packaging compatibilities**

Keep only in original container.

**7.3 Specific end use(s)**

No information available.

**SECTION 8: Exposure controls/personal protection**

**8.1 Control parameters**

<b>Occupational exposure limit values (Workplace Exposure Limits)</b>									
<b>Country</b>	<b>Name of agent</b>	<b>CAS No</b>	<b>Identifier</b>	<b>TWA [ppm]</b>	<b>TWA [mg/m<sup>3</sup>]</b>	<b>STEL [ppm]</b>	<b>STEL [mg/m<sup>3</sup>]</b>	<b>Notation</b>	<b>Source</b>
US	Particulates not otherwise regulated	-	PEL (CA)	-	10	-	-	dust	Cal/OSHA PEL
US	Particulates not otherwise regulated	-	PEL (CA)	-	5	-	-	r	Cal/OSHA PEL
US	particulates not otherwise classified	-	REL	-	-	-	-	appx-D	NIOSH REL
US	particulates not otherwise classified (PNOC)	-	PEL	1,766	15	-	-	partml, i, dust	29 CFR 1910.1000
US	particulates not otherwise classified (PNOC)	-	PEL	529.5	5	-	-	partml, r, dust	29 CFR 1910.1000
US	titanium dioxide	13463-67-7	PEL	-	15	-	-	i, dust	29 CFR 1910.1000
US	titanium dioxide	13463-67-7	REL	-	-	-	-	lowest, appx-A	NIOSH REL

**Notation**

- appx-A NIOSH Potential Occupational Carcinogen (Appendix A)
- appx-D see Appendix D - Substances with No Established RELS
- dust as dust
- i inhalable fraction

## Notation

lowest	exposure by all routes should be carefully controlled to levels as low as possible
partml	particles/ml
r	respirable fraction
STEL	short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)
TWA	time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

## Remarks

Titanium dioxide only in white, grey and blue colored product.

## 8.2 Exposure controls

### Appropriate engineering controls

General ventilation.

### Individual protection measures (personal protective equipment)

#### Eye/face protection

Wear eye/face protection.

#### Hand protection

Wear suitable gloves.

Chemical protection gloves are suitable, which are tested according to EN 374.

Check leak-tightness/impermeability prior to use.

In the case of wanting to use the gloves again, clean them before taking off and air them well.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Use heat resistant gloves when handling hot / molten product.

#### Other protection measures

Wear heat-resistant protective clothing when handling hot/molten product.

#### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Particle filter device (DIN EN 143).

#### Environmental exposure controls

Use appropriate container to avoid environmental contamination.

Keep away from drains, surface and ground water.

## SECTION 9: Physical and chemical properties

## 9.1 Information on basic physical and chemical properties

**Appearance****Physical state**

solid

**Color**

Different according to coloring

**Odor**

characteristic

**Other safety parameters****pH (value)**

not applicable

**Melting point/freezing point**

not determined

**Boiling point or initial boiling point and boiling range**

not determined

**Flash point**

not applicable

**Evaporation rate**

not determined

**Flammability (solid, gas)**

this material is combustible, but will not ignite readily

**Explosive limits**

not determined

Explosion limits of dust clouds

not determined

**Vapor pressure**

not determined

Density

not determined

Vapor density

this information is not available

Relative density

information on this property is not available

**Solubility(ies)**

Water solubility

insoluble

**Partition coefficient**

n-octanol/water (log KOW)

not determined

Auto-ignition temperature

not determined

**Decomposition temperature**

not relevant

**Viscosity**not relevant  
(solid)**Explosive properties**

none

**Oxidizing properties**

none

<b>Information for relevant hazard classes according to GHS</b>	hazard classes acc. to GHS (physical hazards): not relevant
<b>9.2 Other information</b>	there is no additional information

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

This material is not reactive under normal ambient conditions.

### 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

### 10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

### 10.5 Incompatible materials

oxidizers

### 10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known.

Hazardous combustion products: see section 5.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Classification procedure

If not otherwise specified the classification is based on:

Ingredients of the mixture (additivity formula).

#### Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

This mixture does not meet the criteria for classification.

#### Acute toxicity

Test data are not available for the complete mixture.



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## Acute toxicity of components of the mixture

Name of substance	CAS No	Exposure route	End-point	Value	Species	Method	Source
polylactide resin	9051-89-2	oral	LD50	>5,000 mg/kg	rat	-	-
polylactide resin	9051-89-2	dermal	LD50	>2,000 mg/kg	rabbit	-	-

## Skin corrosion/irritation

Classification could not be established because:  
Data are lacking, inconclusive, or conclusive but not sufficient for classification.

## Serious eye damage/eye irritation

Classification could not be established because:  
Data are lacking, inconclusive, or conclusive but not sufficient for classification.

## Respiratory or skin sensitization

### Skin sensitization

Classification could not be established because:  
Data are lacking, inconclusive, or conclusive but not sufficient for classification.

### Respiratory sensitization

Classification could not be established because:  
Data are lacking, inconclusive, or conclusive but not sufficient for classification.

## Germ cell mutagenicity

Classification could not be established because:  
Data are lacking, inconclusive, or conclusive but not sufficient for classification.

## Carcinogenicity

### IARC Monographs

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans					
Name of substance	Name acc. to inventory	CAS No	Classification	Remarks	Number
titanium dioxide	titanium dioxide	13463-67-7	2B		-
styrene, monomer	styrene	100-42-5	2A		-
antimony nickel titanium oxide yellow	nickel compounds		1		-

### Legend

1 Carcinogenic to humans

**Legend**

- 2A Probably carcinogenic to humans
- 2B Possibly carcinogenic to humans

**Remarks**

Titanium dioxide only in white, grey and blue colored product.  
 Antimony nickel titanium oxide yellow only in yellow product.

**National Toxicology Program (United States)**

National Toxicology Program (United States): Report on Carcinogens					
Name of substance	Name acc. to inventory	CAS No	Classification	Remarks	Number
styrene, monomer	styrene	100-42-5	Reasonably anticipated to be a human carcinogen		12th Report on Carcinogens
antimony nickel titanium oxide yellow	nickel compounds		Known to be human carcinogens		10th Report on Carcinogens

**OSHA Carcinogens**

None of the ingredients are listed.

**Reproductive toxicity**

Classification could not be established because:  
 Data are lacking, inconclusive, or conclusive but not sufficient for classification.

**Specific target organ toxicity - single exposure**

Classification could not be established because:  
 Data are lacking, inconclusive, or conclusive but not sufficient for classification.

**Specific target organ toxicity - repeated exposure**

Classification could not be established because:  
 Data are lacking, inconclusive, or conclusive but not sufficient for classification.

**Aspiration hazard**

Shall not be classified as presenting an aspiration hazard.

**11.2 Other information**

There is no additional information.

**SECTION 12: Ecological information**

**12.1 Toxicity**

**Aquatic toxicity (acute)**

Test data are not available for the complete mixture.

**Aquatic toxicity (chronic)**

Test data are not available for the complete mixture.

**12.2 Persistence and degradability**

**Biodegradation**

No data available.

**Persistence**

No data available.

**12.3 Bioaccumulative potential**

Test data are not available for the complete mixture.

**12.4 Mobility in soil**

No data available.

**12.5 Results of PBT and vPvB assessment**

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**12.6 Other adverse effects**

This information is not available.

**Remarks**

Wassergefährdungsklasse, WGK (water hazard class): 3

**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Sewage disposal-relevant information**

Do not empty into drains.

**Waste treatment of containers/packages**

Completely emptied packages can be recycled.  
Handle contaminated packages in the same way as the substance itself.

**Remarks**

Please consider the relevant national or regional provisions.

**SECTION 14: Transport information**

- 14.1 UN number not assigned
- 14.2 UN proper shipping name -
- 14.3 Transport hazard class(es) -
- 14.4 Packing group -
- 14.5 Environmental hazards -
- 14.6 Special precautions for user -
- 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code -
- 14.8 Information for each of the UN Model Regulations  
**Transport of dangerous goods by road or rail (49 CFR US DOT) Additional information**  
 Not subject to transport regulations.

**SECTION 15: Regulatory information**

- 15.1 **Safety, health and environmental regulations specific for the product in question**  
**National regulations (United States)**  
**Superfund Amendment and Reauthorization Act (SARA TITLE III )**  
**The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)**  
 none of the ingredients are listed

**Specific Toxic Chemical Listings (EPCRA Section 313)**

Toxics Release Inventory: Specific Toxic Chemical Listings			
Name of substance	CAS No	Remarks	Effective date
styrene, monomer	100-42-5	-	1987-01-01

**Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)**

**List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)**

Name of substance	CAS No	Remarks	Statutory code	Final RQ pounds (Kg)
styrene, monomer	100-42-5	-	1 3	1000 (454)

**Legend**

1 "1" indicates that the statutory source is section 311(b)(2) of the Clean Water Act

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## Legend

3 "3" indicates that the source is section 112 of the Clean Air Act

## Clean Air Act

none of the ingredients are listed

## Right to Know Hazardous Substance List

### Hazardous Substance List (NJ-RTK)

Name of substance	CAS No	Remarks	Classifications
chrome antimony titanium buff rutile	-	-	
chrome antimony titanium buff rutile	-	-	
titanium dioxide	13463-67-7	-	
styrene, monomer	100-42-5	-	CA F3 R2.

## Legend

CA Carcinogenic

F3 Flammable - Third Degree

R2 Reactive - Second Degree

## California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

Proposition 65 List of chemicals			
Name acc. to inventory	CAS No	Remarks	Type of the toxicity
titanium dioxide	13463-67-7	airborne, unbound particles of respirable size	cancer
styrene	100-42-5	-	cancer

## Industry or sector specific available guidance(s)

### NPCA-HMIS® III

Hazardous Materials Identification System.

American Coatings Association.

Category	Rating	Description
Chronic	*	chronic (long-term) health effects may result from repeated overexposure
Health	0	no significant risk to health
Flammability	2	material that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur

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Category	Rating	Description
Physical hazard	0	material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive
Personal protection	-	-

### NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

Category	Degree of hazard	Description
Flammability	2	material that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur
Health	0	material that, under emergency conditions, would offer no hazard beyond that of ordinary combustible material
Instability	0	material that is normally stable, even under fire conditions
Special hazard	-	-

## 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

### SECTION 16: Other information, including date of preparation or last revision

Date of preparation: 2021-12-21

#### Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
29 CFR 1910.1000	29 CFR 1910.1000, Tables Z-1, Z-2, Z-3 - Occupational Safety and Health Standards: Toxic and Hazardous Substances (permissible exposure limits)
49 CFR US DOT	49 CFR U.S. Department of Transportation
Cal/OSHA PEL	California Division of Occupational Safety and Health (Cal/OSHA): Permissible Exposure Limits (PELs)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
DGR	Dangerous Goods Regulations (see IATA/DGR)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IARC	International Agency for Research on Cancer
IARC Monographs	IARC Monographs on the Evaluation of Carcinogenic Risks to Humans
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)

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Abbr.	Descriptions of used abbreviations
IMDG	International Maritime Dangerous Goods Code
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NIOSH REL	National Institute for Occupational Safety and Health (NIOSH): Recommended Exposure Limits (RELs)
NPCA-HMIS® III	National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition
OSHA	Occupational Safety and Health Administration (United States)
PBT	Persistent, Bioaccumulative and Toxic
PEL	Permissible exposure limit
ppm	Parts per million
STEL	Short-term exposure limit
TWA	Time-weighted average
vPvB	Very Persistent and very Bioaccumulative

## Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT).

International Maritime Dangerous Goods Code (IMDG).

Dangerous Goods Regulations (DGR) for the air transport (IATA).

## Classification procedure

Physical and chemical properties.

Health hazards.

Environmental hazards.

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

## Responsible for the safety data sheet

Chemical Regulatory Compliance Company Telephone: +1 (630) 410-1660  
Chicago, IL e-Mail: GHS@crc-us.com  
USA Website: www.crc-us.com

## Disclaimer

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