

Issuing Date 28-Jul-2023

Revision Date 04-Dec-2024

Revision Number 2.0

1. Identification

Product identifier

Product Name Recycled Polypropylene (Developmental Product)

Other means of identification

Product Code(s) DPR 007A

Recommended use of the chemical and restrictions on use

Recommended use Polymer preparations and compounds

Restrictions on use No information available

Details of the supplier of the safety data sheet

Supplier

Braskem S.A.
Rua Eteno, 1561, Polo Petroquímico de Camaçari
Camaçari, BA, CEP: 42810-000, Brazil
Tel: +55 (71) 3413-3600

E-mail address productsafety@braskem.com

Emergency telephone number

Emergency telephone CHEMTREC Brazil (Rio De Janeiro): +(55)-2139581449 Portuguese
CHEMTREC Brazil (São Paulo): +(55)-1143491359 Portuguese
CHEMTREC Brazil: 0800 892 0479 Portuguese
CHEMTREC International: +1 703-741-5970

2. Hazard(s) identification

GHS Classification

GHS Classification in accordance with ABNT NBR 14725 Standard.

Product not classified as hazardous according to ABNT 14725.

Label elements

Hazard statements

Not classified

Unknown acute toxicity

95 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
 100 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
 95 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Other information

No information available.

3. Composition/information on ingredients

Pure substance/mixture Mixture.

Substance

Not applicable.

Mixture

Chemical name	CAS No.	Weight-%
Post-Consumer recycled polypropylene	9003-07-0	>95
Titanium dioxide	13463-67-7	0.5 - 5

4. First-aid measures**Description of first aid measures**

General advice IF exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water, also under the eyelids.

Skin contact Wash skin with soap and water.

Ingestion Rinse mouth.

Most important symptoms and effects, both acute and delayed

Symptoms Product dust may be irritating to eyes, skin and respiratory system.

Effects of Exposure No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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

Specific hazards arising from the No information available.

chemical

Explosive properties

Sensitivity to static discharge None.

Sensitivity to mechanical impact None.

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures**Personal precautions, protective equipment and emergency procedures**

Personal precautions Ensure adequate ventilation. Avoid generation of dust. Do not breathe dust. Use personal protective equipment as required.

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

Prevention of secondary hazards Take up with inert, damp, non-combustible material using clean non-sparking tools and place into loosely covered plastic containers for later disposal. Take precautionary measures against static discharge.

7. Handling and storage**Precautions for safe handling**

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid generation of dust. Do not breathe dust. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials None known based on information supplied.

8. Exposure controls/personal protection**Exposure guidelines**

Chemical name	Brazil	ACGIH TLV
Titanium dioxide	TWA: 0.2 mg/m ³	TWA: 0.2 mg/m ³ nanoscale respirable

	TWA: 2.5 mg/m ³	particulate matter TWA: 2.5 mg/m ³ finescale respirable particulate matter
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Biological occupational exposure limits This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection No special protective equipment required.

Hand protection Heat resistant gloves are recommended when handling molten materials.

Skin and body protection Wear suitable protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Environmental exposure controls No information available.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance Pellets
Physical state Solid
Color White
Odor No information available
Odor threshold No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point		No data available
Boiling point or initial boiling point and boiling range		No data available
Flammability		No data available
Flammability Limit in Air		
Upper flammability or explosive limits		No data available
Lower flammability or explosive limits		No data available
Flash point		No data available
Autoignition temperature		No data available
Decomposition temperature		No data available
pH		No data available
Kinematic viscosity		No data available
Dynamic viscosity		No data available
Water solubility		No data available
Solubility(ies)		No data available
Partition coefficient		No data available
Vapor pressure		No data available

Relative density	No data available
Bulk density	
Liquid Density	No data available
Relative vapor density	No data available
Particle characteristics	
Particle Size	No data available
Particle Size Distribution	No data available

Other information

Molecular weight	No information available
VOC content	No information available

Other safety characteristics

No information available

10. Stability and reactivity**Reactivity**

Reactivity	None under normal use conditions.
Sensitivity to static discharge	None.
Sensitivity to mechanical impact	None.

Chemical stability

Stability	Stable under normal conditions.
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Possibility of hazardous reactions

Possibility of hazardous reactions	None under normal processing.
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Conditions to avoid

Conditions to avoid	Excessive heat. Dust formation.
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Incompatible materials

Incompatible materials	None known based on information supplied.
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Hazardous decomposition products

Hazardous decomposition products	Decomposition products depend on temperature, exposure to air, and the presence of other substances.
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11. Toxicological information**Information on likely routes of exposure**

Product Information	.
Inhalation	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Product dust may be irritating to eyes, skin and respiratory system.

Acute toxicity No information available.

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document:

ATEmix (oral) 6,666.70 mg/kg.

Unknown acute toxicity

95 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.

100 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

95 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Titanium dioxide	> 2000 mg/kg (Rat)	-	> 5.09 mg/L (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity Titanium dioxide: When encapsulated in polymer is not expected to pose a health hazard when processed under normal conditions of use. Based on available data, the classification criteria are not met.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	Carcinogenicity	ACGIH	IARC
Post-Consumer recycled polypropylene	-	-	Group 3
Titanium dioxide	Group 2B	A3	Group 2B

Legend

LINACH (National List of Carcinogen Agents to Humans)

Group 2B - Possibly Carcinogenic to Humans

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Target organ effects No information available.

Neurological effects No information available.

Aspiration hazard No information available.

12. Ecological information

Ecotoxicity Material in pellet or bead form may mechanically cause adverse effects if ingested by waterfowl or aquatic life.

Persistence and degradability No information available.

Mobility No information available.

Bioaccumulation No information available.

Other adverse effects No information available.

13. Disposal considerations

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not dispose of with household waste. Do not flush to sewer. Do not allow to enter into surface water or drains.

14. Transport information

IMDG Not regulated

IATA Not regulated

ANTT Not regulated

15. Regulatory information

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

Brazil

See section 8 for national exposure control parameters

LINACH (National List of Carcinogen Agents to Humans)

Chemical name	Carcinogenicity
Titanium dioxide	Group 2B

LINACH (National List of Carcinogen Agents to Humans)

Group 2B - Possibly Carcinogenic to Humans

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

Contact supplier for inventory compliance status

16. Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend

SVHC: Substances of Very High Concern for Authorization:
 PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances
 vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances
 STOT: Specific Target Organ Toxicity
 ATE: Acute Toxicity Estimate
 LC50: 50% Lethal Concentration
 LD50: 50% Lethal Dose

Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	SK*	Skin designation

Key literature references and sources for data used to compile the SDS

U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 Environmental Protection Agency
 Acute Exposure Guideline Level(s) (AEGL(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 Japan GHS Classification
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 U.S. National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program
 Organization for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

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This safety data sheet was created pursuant to the requirements of: ABNT NBR 14725:2023.

Disclaimer

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 a 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

End of Safety Data Sheet

