SAFETY DATA SHEET

This safety data sheet complies with the requirements of:
JIS Z 7252:2019

Issuing Date 06-Mar-2024 **Revision Date** 26-Mar-2026 **Revision Number** 1.1

1. Identification

Product Name I'm green™ bio-based Polyethylene – High Density

Synonyms I'm green™ bio-based HDPE

Product Code(s) SGD4960

Registration Number(s) 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

Emergency telephone number +1 703 527 3887 (CHEMTREC International)
CHEMTREC Japan (Tokyo): +(81)-345209637

E-mail address polymer.compliance-europe@braskem.com

Recommended use of the chemical and restrictions on use

Recommended use Polymer preparations and compounds

Restrictions on use No information available

2. Hazard(s) identification

GHS Classification

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS).

Aspiration hazard	Classification not possible
Acute toxicity - Oral	Not classified
Acute toxicity - Dermal	Classification not possible
Acute toxicity - Inhalation (Gases)	Classification not applicable
Acute toxicity - Inhalation (Vapors)	Classification not possible
Acute toxicity - Inhalation (Dusts/Mists)	Classification not possible
Skin corrosion/irritation	Classification not possible
Serious eye damage/eye irritation	Classification not possible
Respiratory sensitization	Classification not possible
Skin sensitization	Classification not possible
Germ cell mutagenicity	Classification not possible
Carcinogenicity	Classification not possible
Reproductive toxicity	Classification not possible
Specific target organ toxicity (single exposure)	Classification not possible
Specific target organ toxicity (repeated exposure)	Classification not possible
Acute aquatic toxicity	Classification not possible
Chronic aquatic toxicity	Not classified
Ozone	Classification not possible

GHS label elements

Hazard statements
• Not classified

Prevention
• Not applicable
Response
• Not applicable
Storage
• Not applicable
Disposal
• Not applicable

Other hazards
• Special danger of slipping by leaking/spilling product
• Electrostatic charges may be generated during handling
• Even with proper grounding and bonding, this material can still accumulate an electrostatic charge
• If sufficient charge is allowed to accumulate, electrostatic discharge and ignition of flammable air-vapor mixtures may occur

3. Composition/information on ingredients

Pure substance/mixture Mixture

Chemical name	CAS No.	Weight-%	ENCS Inventory	ENCS Number	ISHL Inventory	ISHL No.
Polyethylene homopolymer	9002-88-4	< 100	Existing	(6)-1	Existing	(6)-1

Pollutant Release and Transfer Register (PRTR)
Not applicable.

Industrial Safety and Health Law
ISHL Notifiable Substances
Not applicable

Harmful Substances Whose Names Are to be Indicated on the Label
Not applicable

Poisonous and Deleterious Substances Control Law
Not applicable

4. First-aid measures

In case of inhalation Remove to fresh air. Medical aid is necessary if symptoms appear to be an obvious consequence of inhalation.

In case of skin contact After contact with product or dust: Wash skin with soap and water. Get medical attention if irritation develops and persists. After contact with molten product, cool skin area rapidly with cold water. Removal of solidified molten material from skin requires medical assistance.

In case of eye contact Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if irritation develops and persists.

In case of ingestion	Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person.
Most important symptoms/effects, acute and delayed	Product dust may be irritating to eyes, skin and respiratory system.
Note to physicians	Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media	CO_2, dry chemical, dry sand, alcohol-resistant foam. Water spray or fog.
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.
Specific hazards arising from the chemical	Avoid generation of dust. Fine dust dispersed in air may ignite. Powders, dusts, shavings, borings, turnings or cuttings may explode or burn with explosive violence.

Hazardous combustion products Decomposition products depend on temperature, exposure to air, and the presence of other substances, Potential thermal decomposition products include trace aldehydes (including formaldehyde), alcohols, organic acids, and hydrocarbons.

Special Extinguishing Media	None known based on information supplied.
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	Ensure adequate ventilation. Avoid generation of dust. Do not breathe dust. Avoid contact with eyes. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Take precautionary measures against static discharges.
For emergency responders	Use personal protection recommended in Section 8.
Environmental precautions	See Section 12 for additional Ecological Information.
Methods for containment	Prevent further leakage or spillage if safe to do so. Pick up and transfer to properly labeled containers.
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. Clean contaminated objects and areas thoroughly observing environmental regulations.

7. Handling and storage

Handling

Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation. Avoid generation of dust. Do not breathe dust. Avoid contact with eyes. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. Airborne dusts are potentially explosive. Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Handling and processing operations should be conducted in

accordance with 'best practices' (e.g. NFPA-654).

Storage

Storage Conditions Store in a cool, dry area away from potential sources of heat, open flames, sunlight or other chemicals. Keep in an area equipped with sprinklers.

8. Exposure controls/personal protection

Engineering controls Showers
Eyewash stations
Ventilation systems.

Exposure guidelines This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Biological monitoring indicator This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Environmental exposure controls No information available.

Personal protective equipment

Respiratory protection A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator. In case of insufficient ventilation, wear suitable respiratory equipment.

Eye/face protection Wear safety glasses with side shields (or goggles). During hot processing: Tight sealing safety goggles. If there is a risk of contact: Face protection shield.

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

Skin and body protection Wear suitable protective clothing. During hot processing: Long sleeved clothing. Protective shoes or boots.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Translucent. Granules.
Physical state	Solid
Color	White
Odor	Not applicable
Odor threshold	Not applicable

Property	**Values**	**Remarks • Method**
Melting point / freezing point		No data available
Initial boiling point and boiling range		Not applicable
Flammability		Not flammable
Upper/lower flammability or explosive limits		No data available
Upper flammability or explosive limits		No data available
Lower flammability or explosive limits		No data available

Flash point		No data available
Evaporation rate		No data available
Autoignition temperature	350 °C / 662 °F	
Decomposition temperature		No data available
pH		Not applicable
Viscosity		
Kinematic viscosity		No data available
Dynamic viscosity		No data available
Water solubility	Insoluble	
Solubility(ies)	Xylene	
Partition Coefficient (n-octanol/water)		No data available
Vapor pressure		Not applicable
Density and/or relative density		
Relative density		No data available
Liquid Density		No data available
Bulk density	0.958 - 0.964 g/cm^3	No data available
Relative vapor density		Not applicable
Particle characteristics		Not applicable
Particle Size		Not applicable
Particle Size Distribution		Not applicable

Other information

Explosive properties	No information available
Oxidizing properties	No information available

10. Stability and reactivity

Reactivity None under normal use conditions.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions Reacts strongly with fluorine.

Conditions to avoid High temperature. Dust formation.

Incompatible materials Fluorine, Strong acids, Strong oxidizing agents, Chlorinated solvents, Aromatic compounds.

Hazardous decomposition products Decomposition products depend on temperature, exposure to air, and the presence of other substances, Potential thermal decomposition products include trace aldehydes (including formaldehyde), alcohols, organic acids, and hydrocarbons.

Explosion data
Sensitivity to static discharge None.

Sensitivity to mechanical impact None.

11. Toxicological information

Acute toxicity

Numerical measures of toxicity - Product Information
Based on available data, the classification criteria are not met

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

ATEmix (oral) >4000 mg/kg

Numerical measures of toxicity - Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Polyethylene homopolymer	> 4000 mg/kg (Rat)	-	-

Abbreviations and acronyms

Rat: Rat

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

Ingestion Specific test data for the substance or mixture is not available. May cause irritation of the mouth, throat and stomach.

Inhalation Specific test data for the substance or mixture is not available. Inhalation of dust in high concentration may cause irritation of respiratory system.

Skin contact Specific test data for the substance or mixture is not available. Contact with dust can cause mechanical irritation or drying of the skin.

Eye contact Specific test data for the substance or mixture is not available. Dust contact with the eyes can lead to mechanical irritation.

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 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	Japan	IARC
Polyethylene homopolymer 9002-88-4	-	Group 3

Legend

IARC (International Agency for Research on Cancer)

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.

Aspiration hazard No information available.

12. Ecological information

Ecotoxicity The environmental impact of this product has not been fully investigated. Classification not possible.

Persistence and degradability No information available.

Bioaccumulation No information available.

Mobility in soil No information available.

Hazardous to the ozone layer Based on available data, the classification criteria are not met. Classification not possible.

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 reuse empty containers.

14. Transport information

International Regulations

IMDG Not regulated

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
No information available

ADR Not regulated

IATA Not regulated

Domestic regulations
See section 15. If product is subject to the Fire Service Law, Poisonous and Deleterious Substance Control Law, High Pressure Gas Safety Law, Ship Safety Law, and/or the Civil Aeronautics Act, the requirements that are specific to each of the laws must be followed.

Japan Not regulated

15. Regulatory information

National regulations
Pollutant Release and Transfer Register (PRTR)
Not applicable

Industrial Safety and Health Law
Not applicable
ISHL Notifiable Substances
Not applicable

Poisonous and Deleterious Substances Control Law
Not applicable
Fire Service Law:
Not applicable
Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (CSCL)

Not applicable

Act on Prevention of Marine Pollution and Maritime Disaster
Not applicable

International Regulations

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

Issuing Date	06-Mar-2024
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Revision Note	Initial Release.

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)	Ceiling	Maximum limit value
Sk*	Skin designation	+	Sensitizers

Key literature references and sources for data used to compile the SDS
U.S. Environmental Protection Agency ChemView Database
European Chemicals Agency
European Food Safety Authority (EFSA)
EPA (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)
National Institute of Technology and Evaluation (NITE)
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

Disclaimer

This SDS complies with the requirements of JIS Z 7253:2019 (Japan). 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