SAFETY DATA SHEET

This safety data sheet complies with the requirements of:
JIS Z 7252:2019; JIS Z 7253:2019

Issuing Date 28-Oct-2020 **Revision date** 02-Oct-2025 **Revision Number** 2.0

1. Identification

Product Name High Density Polyethylene - Copolymer

Product Code(s) HDB0358, HDF8000, HDB0763, HDB0355, HDP3049LS, HDI0861U1

Registration Number(s) No information available

Details of the supplier of the safety data sheet

Supplier
Braskem Idesa
Blvd. Manuel Ávila Camacho #36 piso 24
Col. Lomas de Chapultepec Del. Miguel Hidalgo
CP 11000, Ciudad de México - México
+52(55) 6234-1100

Emergency telephone number CHEMTREC Japan (Tokyo): +(81)-345209637
CHEMTREC International: +1 703-741-5970

E-mail address Product.safety@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

Classification of the substance or mixture

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

Aspiration hazard	Classification not possible
Acute toxicity - Oral	Classification not possible
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
Hazardous to the aquatic environment - acute	Classification not possible
Hazardous to the aquatic environment - chronic	Classification not possible
Hazardous to the ozone layer	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

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Chemical name	CAS No.	Weight-%	ENCS Inventory	ENCS Number	ISHL Inventory	ISHL No.
1-Hexene, polymer with ethene	25213-02-9	>99	Existing	(6)-1594	Existing	9-335

Pollutant Release and Transfer Register (PRTR)
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. After contact with molten product, cool skin area rapidly with cold water. Removal of solidified molten material from skin requires medical assistance. Get medical attention if irritation develops and persists.

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 Clean mouth with water and afterwards drink plenty of water. Do NOT induce vomiting.

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	CO2, 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.
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. Use personal protective equipment as required. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Take precautionary measures against static discharges. Avoid contact with skin, eyes or clothing.
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.
Methods for cleaning up	Take up with inert, damp, non-combustible material using clean non-sparking tools and place into loosely covered plastic containers for later disposal. Pick up and transfer to properly labeled containers.
Prevention of secondary hazards	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. 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. Do not eat, drink or smoke when using this product. 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). Take off contaminated clothing and wash before reuse.
Hygiene Measures	Do not eat, drink or smoke when using this product. Wash hands before breaks and after work.

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

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

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

Engineering controls Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen- deficient environment.

Environmental exposure controls No information available.

Personal protective equipment

Respiratory protection The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator.

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

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

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

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Translucent Pellets
Physical state	Solid
Color	White to off-white
Odor	No information available
Odor threshold	No information available

Property	**Values**	**Remarks • Method**
Melting point / freezing point	110 - 170 °C / 230 - 338 °F	No data available
Initial boiling point and boiling range		No data available
Flammability		No data available
Upper/lower flammability or explosive limits		
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	> 340 °C / > 644 °F	
Decomposition temperature		No data available

SADT (°C)		No data available
pH		No data available
Viscosity		
Kinematic viscosity		No data available
Dynamic viscosity		No data available
Water solubility	Insoluble in water	
Solubility(ies)		No data available
Partition Coefficient (n-octanol/water)		No data available
Vapor pressure		No data available
Density and/or relative density		
Relative density	0.940 – 0.970 g/cm³	
Liquid Density		No data available
Bulk density		No data available
Relative vapor density		No data available
Particle characteristics		
Particle Size		Not applicable
Particle Size Distribution		Not applicable

Other information

Molecular weight	No information available
VOC content	No information available
Softening point	No information available

Information with regard to physical hazard classes

Explosives	
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 violently with fluorine.

Conditions to avoid Dust formation. If heated to more than 300°C, the product may form vapors or fumes which could cause respiratory tract irritation, coughing and shortness of breath. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material.

Incompatible materials Aromatic solvents, Chlorinated solvents.

Hazardous decomposition products Decomposition products depend on temperature, exposure to air, and the presence of other substances, Processing may release irritating fumes, olefinic and paraffinic compounds, carbon monoxide, and carbon dioxide, 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

Product Information .

Ingestion May cause irritation of the mouth, throat and stomach.

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

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

Eye contact 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 Based on available data, the classification criteria are not met. Classification not possible.

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

Skin corrosion/irritation Classification not possible.

Serious eye damage/eye irritation Classification not possible.

Respiratory or skin sensitization Classification not possible.

Germ cell mutagenicity Classification not possible.

Carcinogenicity Classification not possible.

Reproductive toxicity Classification not possible.

STOT - single exposure Classification not possible.

STOT - repeated exposure Classification not possible.

Aspiration hazard None of the ingredients are known to be an aspiration hazard.

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.

Bioaccumulative potential There is no data for this product.

Mobility in soil No information available.

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

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

International Regulations

IMDG Not regulated

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

Notifiable Substances / Substances Subject to Risk Assessment
Not applicable
Harmful Substances to be Indicated on Label
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 28-Oct-2020

Revision date 02-Oct-2025

Revision Note Template update.

Key or legend to abbreviations and acronyms used in the safety data sheet
List may include phrases which are not applicable to this product

ACGIH	American Conference of Governmental Industrial Hygienists
ADN	Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Europe)
ADR	Agreement concerning the International Carriage of Dangerous Goods by Road (Europe)
AIIC	Australian Inventory of Industrial Chemicals
ATE	Acute Toxicity Estimate
ASTM	American Society for the Testing of Materials
bar	Biological Reference Values for Chemical Compounds in the Work Area
BAT	Biological tolerance values for occupational exposure
BEL	Biological exposure limits
bw	Body weight
Ceiling	Maximum limit value
CMR	Carcinogen, Mutagen or Reproductive Toxicant
DOT	Department of Transportation (United States)
DSL	Domestic Substances List (Canada)
EmS	Emergency Schedule
ENCS	Existing and New Chemical Substances (Japan)
EPA	U.S. Environmental Protection Agency
GHS	Globally Harmonized System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IBC	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO	International Civil Aviation Organization
IECSC	Inventory of Existing Chemical Substances in China
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
ISHL	Industrial Safety and Health Law (Japan)
ISO	International Organization for Standardization
KECI	Korean Existing Chemicals Inventory
LC50	Lethal Concentration to 50% of a test population
LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)
MARPOL	International Convention for the Prevention of Pollution from Ships
n.o.s.	Not Otherwise Specified
NOAEC	No Observed Adverse Effect Concentration
NOAEL	No Observed Adverse Effect Level
NOELR	No Observable Effect Loading Rate
NZIoC	New Zealand Inventory of Chemicals
OECD	Organization for Economic Cooperation and Development
OEL	Occupational exposure limits
PBT	Persistent, Bioaccumulative and Toxic substance

PICCS	Philippines Inventory of Chemicals and Chemical Substances
PMT	Persistent, Mobile and Toxic
PPE	Personal protective equipment
PRTR	Pollutant Release and Transfer Register
QSAR	Quantitative Structure Activity Relationship
RID	Agreement concerning the International Carriage of Dangerous Goods by Rail (Europe)
SADT	Self-Accelerating Decomposition Temperature
SAR	Structure-activity relationship
SDS	Safety Data Sheet
SL	Surface Limit
STEL	Short Term Exposure Limit
STOT RE	Specific target organ toxicity - Repeated exposure
STOT SE	Specific target organ toxicity - Single exposure
TCSI	Taiwan Chemical Substance Inventory
TDG	Transport of Dangerous Goods (Canada)
TSCA	Toxic Substances Control Act (United States)
TWA	Time-Weighted Average
UN	United Nations
VOC	Volatile organic compounds
vPvB	Very Persistent and Very Bioaccumulative
vPvM	Very Persistent and Very Mobile
As	Allergenic substance
DS	Dermal Sensitizer
Ot	Ototoxicant
pOt	Ototoxicant - potential to cause hearing disorders
PS	Photosensitizer
RS	Respiratory Sensitizer
S	Sensitizer
poS	Sensitizer - capable of causing occupational asthma
Sa	Simple asphyxiant
Sd	Skin designation
pSd	Skin designation - potential for cutaneous absorption
Sdv	Skin designation - vacated
Sk	Skin notation
dSk	Skin notation - danger of cutaneous absorption
pSk	Skin notation - potential for cutaneous absorption

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)
U.S. 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 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)
International Organization for Economic Co-operation and Development (OECD) Environment, Health, and Safety Publications
International Organization for Economic Co-operation and Development (OECD) High Production Volume Chemicals Program
International Organization for Economic Co-operation and Development (OECD) Screening Information Data Set
United Nations World Health Organization (WHO)

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