SAFETY INFORMATION SHEET

POLYPROPYLENE
Borstar® RA150E

1. IDENTIFICATION

Product name: Borstar® RA150E

Intended use: Raw material for plastic industry

Manufacturer: Abu Dhabi Polymers Co. Ltd (Borouge)
Address: P.O. Box 11764, Ruwais, U.A.E.
Telephone: +9712 6020600
Facsimile: +9712 6020771

Supplier: Borouge Pte Ltd
Address: 1 George Street, #18-01, Singapore 049145
Telephone: +65 6275 4100
Facsimile: +65 6377 1233
Email: product.stewardship@borouge.com

2. HAZARDS IDENTIFICATION

GHS classification:
This product is not hazardous according to Singapore Standard SS 586: Part 2: 2022 Globally Harmonized System of classification and labeling of chemicals (GHS) – Singapore's adaptations.

Physical Hazards:	Not classified based on available information.
Health Hazards:	Not classified based on available information.
Environmental Hazards:	Not classified based on available information.
Other hazards:	The product burns, but is not classified as flammable. Inhalation of dust may irritate the respiratory tract. Prolonged inhalation of high doses of decomposition products may give headache or irritation of the respiratory tract. Dust from the product (when mixed with air in critical proportions and in the presence of an ignition source) gives a potential dust explosion risk. Spilled material may present a slipping hazard.

GHS label elements:

Pictograms:	Nil.
Signal word:	Nil.
Hazard statements:	Nil.
Precautionary statements:	Nil.

3. COMPOSITION / INFORMATION ON INGREDIENTS

The product is a polypropylene polymer.
Contains no substance classified as hazardous in concentrations, which should be taken into account according to Singapore Standard SS 586: Part 2: 2022 Globally Harmonized System of classification and labeling of chemicals – Singapore's adaptations.

4. FIRST AID MEASURES

Inhalation:	If experiencing respiratory symptoms: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice / attention.
Skin contact:	If molten material comes in contact with skin, cool with plenty of water. Do not remove solidified product, as removal could result in severe tissue damage. Obtain medical attention.
Eye contact:	No specific instruction needed.
Ingestion:	No specific instruction needed.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:	Dry chemicals, foam, Carbon Dioxide, water spray or fog.
Specific hazards during fire-fighting:	Product will burn under fire conditions. Dust from the product (when mixed with air in critical proportions and in the presence of an ignition source) gives a potential dust explosion risk. Principal toxicant in the smoke is Carbon Monoxide.
Special protective actions for fire fighters:	Fire fighters should wear self-contained breathing apparatus, boots, gloves, goggles and full protective clothing. Extinguish from the upwind direction.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency measures:	No flames, No sparks. Eliminate all sources of ignition. Avoid breathing dust. Use personal protective equipment as required. Refer to Section 8: Exposure Controls / Personal Protection.
Methods for cleaning up:	Vacuum or sweep up spill. All spill of material must be removed immediately to prevent slipping accidents. Recycle or dispose loose material properly. Do not flush into surface water or sanitary sewer system. Should not be released into the environment. It is recommended to implement systems and practices (such as Operation Clean Sweep®) to prevent accidental release of plastics into the environment.

7. HANDLING AND STORAGE

Advice on safe handling:	During processing and thermal treatment of the product, small amounts of volatile hydrocarbons may be released. Avoid inhalation of dust and decomposition fumes. Provide adequate ventilation. Local exhaust ventilation may be necessary or additional personal protective equipment (PPE) may be necessary.
Advice on protection against fire and explosion:	Dust from the product gives a potential risk for dust explosion. Avoid the formation or spread of dust in the atmosphere. Avoid the build-up of dust. Clean regularly. Ground container and receiving equipment. Take precautionary measures against static discharge.
Storage:	Safety aspects do not require any special precautions in terms of storage. Keep in a dry place. More information on storage can be found in Product Data Sheet (PDS) for this product.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters / Occupational exposure limits

Component	Basis	Control parameters / Occupational exposure limits
Inhalable dust	USA / ACGIH	TLV-TWA: 10mg/m^3
	UK HSE EH40/2005	8 hr TWA: 10mg/m^3
Respirable dust	USA / ACGIH	TLV-TWA: 3mg/m^3
	UK HSE EH40/2005	8 hr TWA: 4mg/m^3

Engineering controls: Extraction to remove dust at its source. Provide adequate ventilation.
Local exhaust ventilation may be necessary.

Personal protective equipment

Hand protection:	Wear suitable gloves to protect against thermal risks and mechanical injury, when needed. When selecting suitable protective gloves, please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
Eye protection:	Safety glasses.
Skin and body protection:	Protective suit.
Respiratory protection:	Wear dust mask.
Hygiene measures:	When using, do not eat, drink or smoke. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Solid, pellet, natural colour	Melting point / range:	130 - 170ºC
Odour:	Odourless	Ignition temperature:	>320ºC
Density:	0.9 - 1.0g/cm^3	Solubility in water:	Insoluble in water

10. STABILITY AND REACTIVITY

Chemical stability:	The product is a stable thermoplastic.
Reactivity:	No chemical reactivity.
Conditions to avoid:	Dusty conditions, heat, open flame, spark, static electricity.
Incompatible materials:	Nil.
Hazardous decomposition materials:	On combustion releases: Oxides of Carbon.

11. TOXICOLOGICAL INFORMATION

The product is not classified as a hazardous mixture according to Singapore Standard SS 586: Part 2: 2022 Globally Harmonized System of classification and labeling of chemicals – Singapore's adaptations.

However, inhalation of dust may irritate the respiratory tract. Prolonged inhalation of high doses of decomposition products may give headache or irritation of the respiratory tract.

12. ECOLOGICAL INFORMATION

The product is not classified as hazardous to the environment according to Singapore Standard SS 586: Part 2: 2022 Globally Harmonized System of classification and labeling of chemicals – Singapore's adaptations.

13. DISPOSAL CONSIDERATIONS

Reuse or recycle if not contaminated. The product may be safely used as fuel. Proper combustion does not require any special flue gas control. Check with local regulations.

14. TRANSPORT INFORMATION

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Remarks: Not dangerous goods according to ADR/RID, AND, IMDG-Code, ICAO/IATA-DGR regulations.

15. REGULATORY INFORMATION

Chemical inventory	Status
Australia / AIIC	Y
Canada / DSL:	Y
China / IECSC:	Y
Japan / ENCS:	Y
Korea / KECI:	Y
New Zealand / NZIoC:	E
Philippines / PICCS:	Y
Taiwan / TCSI:	Y
USA / TSCA (all relevant ingredients designated as active):	Y

Y = All ingredients are on the inventory.
E = All ingredients are on the inventory or exempt from listing.
N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing.

16. OTHER INFORMATION

Reasons for revision:	Changes and / or additions made to Sections 1, 2, 3, 4, 5, 6, 7, 8, 11, 12, 14, 15 and 16.
Prepared by:	Product Stewardship Specialist
Date issued:	22/01/2026
Document No.:	CHSE-SIS-420
Rev. No.:	2

This edition of the document supersedes any previous editions.

Borouge reserves the right to modify this document at any time, so please ensure to view it frequently. Changes to this document may be made with or without notice. Please always ensure that you are viewing the latest edition by downloading documents directly from our website at www.borouge.com.

DISCLAIMER

To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication, however we do not assume any liability whatsoever for the accuracy and completeness of such information.

This statement is not intended and should not be construed as a warranty or representation of any kind for which Borouge would assume legal responsibility. Without anyway limiting the abovementioned, Borouge gives no warranties and makes no representations as to the merchantability or fitness for a particular purpose or application of Borouge products.

It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the products for the customer's particular purpose.

The customer is responsible for the appropriate, safe and legal use, processing and handling of our products.

No liability can be accepted in respect of the use of Borouge products in conjunction with other materials. The information contained herein relates exclusively to our products when not used in conjunction with any third-party materials.

All terms and conditions regarding the supply of Borouge products shall be subject to Borouge General Sales Terms.

Borstar is a registered trademark of the Borealis group