

Safety Data Sheet(SDS)

1. Identification of the substance/mixture and of the company/undertaking

- 1) Product identifier : Ecotran E2150T BK
- 2) Relevant identified uses of the substance or mixture and uses advised against
 - Relevant identified uses
Engineering plastics for automobile, electrical and electronic parts, etc.,
 - Uses advised against
Be well-informed of the precautions
- 3) Supplier information
 - Manufacturer
Company : HDC Polyall co., ltd
Address : 5F 102DONG IPARK, 239, JEONGJAIL-RO, BUNDANG-GU, SEONGNAM-SI, GYEONGGI-DO, 13556, KOREA
Emergency number : +82-31-785-2262

2. HAZARD IDENTIFICATION

- 1) Hazard classification
Not classified
- 2) Allocation label elements
Hazard pictograms : Not applicable
Signal word : Not applicable
Hazard statements : Not applicable
Precautionary statements: Not applicable
- 3) Other hazards
 - Product NFPA Level : Health, Flammability, Reactivity
(※ 0 = Insufficient , 1 = Slightly , 2 = ordinary , 3 = Highness , 4 = Very high)

Chemical Name	NFPA Level		
	Health	Flammability	Reactivity
Polyphenylene Sulfide	1	1	0
Glass, oxide	1	0	0
CaCO ₃	1	0	0
Carbon black	1	1	0
Sales confidential component	1	1	0

3. Composition/Information on ingredients

Components	Common name	CAS No.	PCT(wt%)
Polyphenylene Sulfide		25212-74-2	40-70
Glass, oxide		65997-17-3	15-35
CaCO ₃		1317-65-3, 471-34-1	0-15
Carbon black		1333-86-4	<1
Sales confidential component			<15

4. FIRST AID MEASURES

- 1) Following eye contact
 - In case of contact with substance, immediately flush eyes with running water at least 20 minutes.
- 2) Following skin contact
 - Do not take off polymer from skin before consulting a doctor.
 - Get immediate medical advice/attention.
 - Move victim to fresh air.
 - Remove and isolate contaminated clothing and shoes.
 - Wash contaminated clothing and shoes before reuse.
- 3) Following inhalation
 - Administer oxygen if breathing is difficult.
 - Give artificial respiration if victim is not breathing.
 - Specific medical treatment is urgent.
- 4) Following ingestion
 - Get immediate medical advice/attention.
 - Not digestive, and vomiting is recommended if the quantity taken is much.
- 5) Advice to physician
 - Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
 - Remove contaminated, saturated clothing immediately. In the case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible)

5. FIRE FIGHTING MEASURES

- 1) Suitable (and unsuitable) extinguishing media
 - o Suitable extinguishing media
 - Dry sand, dry chemical, alcohol-resistant foam, water spray, regular foam, CO₂
 - o Unsuitable extinguishing media
 - High pressure water streams
- 2) Special hazards arising from the substance or mixture
 - o Pyrolytic product
 - Combustion Products : Carbon dioxide, Carbon monoxide
 - Hazard Combustion Products : Carbon dioxide, Carbon monoxide, Sulfur oxide etc.

- Risk of fire and explosion
 - Containers may explode when heated.
 - Fire will produce irritating and/or toxic gases.
 - If inhaled, may be harmful.
 - May be ignited by heat, sparks or flames.
 - Some of these materials may burn, but none ignite readily.
 - Other
 - No data available
- 3) Special protective equipment for firefighters
- Dike fire-control water for later disposal; do not scatter the material.
 - Move containers from fire area if you can do it without risk.
 - Special Equipment for Fire Fighters : Breathing aid and Protective clothes

6. ACCIDENTAL RELEASE MEASURES

- 1) Health considerations and protective equipment
- Do not touch or walk through spilled material.
 - Eliminate all ignition sources.
 - Please note that materials and conditions to avoid.
 - Prevent dust cloud.
 - Stop leak if you can do it without risk.
 - Ventilate the area.
- 2) Environmental precautions
- Prevent entry into waterways, sewers, basements or confined areas.
- 3) For cleaning up
- Large Spill; Dike far ahead of liquid spill for later disposal.
 - Small Spill; Flush area with flooding quantities of water. And take up with sand or other non-combustible absorbent material and place into containers for later disposal.
 - With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

7. HANDLING AND STORAGE

- 1) Precautions for safe handling
- Be careful about the danger of being hurt if the 1-ton bag drops while being lifted.
 - Dangerous reaction : Not expected, but prevent the material from contacting with oxidizing agents.
 - Do not make contact with molten polymer.
 - Immediately remove spilled products from the floor to avoid injury.
- 2) Conditions for safe storage (including any incompatibilities)
- Store in a closed container.
 - Store in a cool dry place or the closed container. Maintain dryness of resin.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

- 1) Chemical exposure limits, Biological exposure standard

Components	Occupational exposure	ACGIH	Biological standard
Polyphenylene Sulfide	Not applicable	Not applicable	Not applicable
Glass, oxide	TWA : 5 mg/m ³	Not applicable	Not applicable
CaCO ₃	TWA : 10mg/m ³	Not applicable	Not applicable
Carbon black	TWA : 3.5mg/m ³	STEL : 3 mg/m ³	Not applicable
Sales confidential component	Not applicable	Not applicable	Not applicable

2) Appropriate engineering controls

- No data available

3) Personal protection equipment

- Respiratory protection
 - Respiratory protection is required when used frequently or when exposure is severe.
- Eye protection
 - Wear breathable safety goggles to protect from particulate material causing eye irritation or other disorder.
- Hand protection
 - Wear suitable chemical resistant gloves.
- Body protection
 - Wear suitable chemical resistant clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	No data available
Physical state	solid
Colour	No data available
Odour	No data available
Odour threshold	No data available
pH	No data available
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability(solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Solubility(ies)	No data available
Vapour density	No data available

Relative density	No data available
n-octanol/water partition coefficient	No data available
Auto ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Molecular weight(mass)	No data available

10. STABILITY AND REACTIVITY

- 1) Stability and hazardous reactivity
 - Fire may produce irritating and/or toxic gases.
 - Stability: Stable at normal temperature and pressure
- 2) Conditions to avoid
 - Heat, sparks or flames
- 3) Incompatible materials
 - Combustibles
- 4) Hazardous decomposition products
 - Irritating and/or toxic gases

11. TOXICOLOGICAL INFORMATION

- 1) Exposure route information
 - Inhalation: No data available
 - Skin Contact : No data available
 - Eye Contact : No data available
 - Ingestion: No data available
- 2) Health hazard information
 - o Acute toxicity
 - ACUTE TOXICITY(Oral) PRODUCT : Not classified
 - Polyphenylene Sulfide : No data available
 - Glass, oxide : No data available
 - CaCO₃ : No data available
 - Carbon black : LD₅₀ > 8000 mg/kg Rat
 - Sales confidential component : No data available
 - ACUTE TOXICITY(Dermal) PRODUCT : Not classified
 - Polyphenylene Sulfide : No data available
 - Glass, oxide : No data available
 - CaCO₃ : No data available
 - Carbon black : No data available
 - Sales confidential component : No data available

- ACUTE TOXICITY(Inhalation:Gases) PRODUCT : Not classified
 - Polyphenylene Sulfide : No data available
 - Glass, oxide : No data available
 - CaCO₃ : No data available
 - Carbon black : No data available
 - Sales confidential component : No data available
- ACUTE TOXICITY(Inhalation:Vapours) PRODUCT : Not classified
 - Polyphenylene Sulfide : No data available
 - Glass, oxide : No data available
 - CaCO₃ : No data available
 - Carbon black : No data available
 - Sales confidential component : No data available
- ACUTE TOXICITY(Inhalation:Dust/mist) PRODUCT : Not classified
 - Polyphenylene Sulfide : No data available
 - Glass, oxide : No data available
 - CaCO₃ : No data available
 - Carbon black : No effects Rat
 - Sales confidential component : No data available
- SKIN CORROSION/IRRITATION PRODUCT : Not classified
 - Polyphenylene Sulfide : No data available
 - Glass, oxide : No data available
 - CaCO₃ : No data available
 - Carbon black : Not irritating Rabbit
 - Sales confidential component : No data available
- SERIOUS EYE DAMAGE/EYE IRRITATION PRODUCT : Not classified
 - Polyphenylene Sulfide : No data available
 - Glass, oxide : No data available
 - CaCO₃ : No data available
 - Carbon black : Slightly irritating Human
 - Sales confidential component : No data available
- RESPIRATORY SENSITIZATION PRODUCT : Not classified
 - Polyphenylene Sulfide : No data available
 - Glass, oxide : No data available
 - CaCO₃ : No data available
 - Carbon black : Not sensitising Mouse
 - Sales confidential component : No data available
- SKIN SENSITIZATION PRODUCT : Not classified
 - Polyphenylene Sulfide : No data available
 - Glass, oxide : No data available

- CaCO₃ : No data available
- Carbon black : Not sensitising Guinea pig
- Sales confidential component : No data available
- CARCINOGENICITY PRODUCT : Not classified
 - Polyphenylene Sulfide : No data available
 - Glass, oxide : No data available
 - CaCO₃ : No data available
 - Carbon black : Notice of Employment and Labor 2 (Notice of Employment and Labor)
IARC: Group 2B (IARC)
OSHA: Present (OSHA)
ACGIH: Group A3 (ACGIH)
 - Sales confidential component : No data available
- GERM CELL MUTAGENICITY PRODUCT : Not classified
 - Polyphenylene Sulfide : No data available
 - Glass, oxide : No data available
 - CaCO₃ : No data available
 - Carbon black : Negative Drosophila melanogaster
 - Sales confidential component : No data available
- REPRODUCTIVE TOXICITY PRODUCT : Not classified
 - Polyphenylene Sulfide : No data available
 - Glass, oxide : No data available
 - CaCO₃ : No data available
 - Carbon black : No adverse effects on the development. Rat
 - Sales confidential component : No data available
- SPECIFIC TARGET ORGAN TOXICITY SINGLE EXPOSURE PRODUCT : Not classified
 - Polyphenylene Sulfide : No data available
 - Glass, oxide : No data available
 - CaCO₃ : No data available
 - Carbon black : No data available
 - Sales confidential component : No data available
- SPECIFIC TARGET ORGAN TOXICITY REPEATED EXPOSURE PRODUCT : Not classified
 - Polyphenylene Sulfide : No data available
 - Glass, oxide : No data available
 - CaCO₃ : No data available
 - Carbon black : No significant changes from the normal in any of the organs of the mice fed. Mouse
 - Sales confidential component : No data available
- ASPIRATION HAZARD PRODUCT : Not classified
 - Polyphenylene Sulfide : No data available
 - Glass, oxide : No data available
 - CaCO₃ : No data available

- Carbon black : No data available
- Sales confidential component : No data available

12. ECOLOGICAL INFORMATION

1) Aquatic toxicity

- Fish
 - Polyphenylene Sulfide : No data available
 - Glass, oxide : 96hr - LC50 (Danio rerio) > 1,000 mg/L (OECD Guideline 203, GLP)
 - CaCO3 : No data available
 - Carbon black : LC0 Not Toxic Fish(Brachydanio rerio)
 - Sales confidential component : No data available
- Crustacea
 - Polyphenylene Sulfide : No data available
 - Glass, oxide : 48hr - EC50 (Daphnia magna) > 1,000 mg/L (OECD Guideline 202, GLP)
 - CaCO3 : No data available
 - Carbon black : EC50 > 5600 mg/L Aquatic invertebrates(Daphnia magna)
 - Sales confidential component : No data available
- Aquatic algae
 - Polyphenylene Sulfide : No data available
 - Glass, oxide : 72hr - EC50 (Pseudokirchneriella subcapitata) > 1,000 mg/L (OECD Guideline 201, GLP)
 - CaCO3 : No data available
 - Carbon black : EC50 > 10000 mg/L Aquatic algae(Scenedesmus subspicatus)
 - Sales confidential component : No data available

2) Persistence and degradation

- n-octanol water partition coefficient
 - Polyphenylene Sulfide : No data available
 - Glass, oxide : No data available
 - CaCO3 : No data available
 - Carbon black : No data available
 - Sales confidential component : No data available
- Degradation
 - Polyphenylene Sulfide : No data available
 - Glass, oxide : No data available
 - CaCO3 : No data available
 - Carbon black : No data available
 - Sales confidential component : No data available
- Biodegradation
 - Polyphenylene Sulfide : No data available
 - Glass, oxide : No data available
 - CaCO3 : No data available
 - Carbon black : Carbon black is an inorganic substance and will not biodegraded by microorganisms.
 - Sales confidential component : No data available

3) Bioaccumulative potential

- Polyphenylene Sulfide : No data available
- Glass, oxide : No data available

- CaCO₃ : No data available
- Carbon black : No data available
- Sales confidential component : No data available

4) Mobility in soil

- Polyphenylene Sulfide : No data available
- Glass, oxide : No data available
- CaCO₃ : No data available
- Carbon black : No data available
- Sales confidential component : No data available

5) Other adverse effects

- Polyphenylene Sulfide : No data available
- Glass, oxide : No data available
- CaCO₃ : No data available
- Carbon black : No data available
- Sales confidential component : No data available

13. DISPOSAL CONSIDERATIONS

1) Disposal methods

- Discharge, disposal and incineration may be subject to national laws

2) Precautions (including disposal of contaminated container of package)

- Process according to environmental laws and regulations.

14. TRANSPORT INFORMATION

1) UN No. : Not applicable

2) Proper shipping name : Not applicable

3) Class or division : Not applicable

4) Packing group : Not applicable

5) Marine pollutant : Not applicable

6) Special safety response for transportation or transportation measure :

Emergency measures in case of fire : Not applicable

Emergency measures in the effluent : Not applicable

- ADR : · Tunnel restriction code : Not applicable

- IMDG : Marine pollutant : Not applicable

- Air transport(IATA)

· UN No. : Not applicable

· Proper shipping name : Not applicable

· Class or division : Not applicable

· Packing group : Not applicable

15. REGULATORY INFORMATION

- 1) 1907/2006/EC PRODUCT : EU - REACH (1907/2006) - Annex V - Exemptions from the Obligation to Register (Article 2(7)(b)), EU - REACH (1907/2006) - Community Rolling Action Plan (CoRAP) List of Substances, EU - REACH (1907/2006) - List of Pre-registered Substances, EU - REACH (1907/2006) - List of Registered Substances, EU - REACH (1907/2006) - Registered Substances Considered not to be PBT/vPvB, EU - REACH (1907/2006) - Registered Substances PBT/vPvB Assessment Does Not Apply
 - Polyphenylene Sulfide : EU - REACH (1907/2006) - List of Pre-registered Substances
 - Glass, oxide : EU - REACH (1907/2006) - Annex V - Exemptions from the Obligation to Register (Article 2(7)(b)), EU - REACH (1907/2006) - List of Pre-registered Substances, EU - REACH (1907/2006) - List of Registered Substances, EU - REACH (1907/2006) - Registered Substances PBT/vPvB Assessment Does Not Apply
 - CaCO₃ : EU - REACH (1907/2006) - List of Pre-registered Substances
 - Carbon black : EU - REACH (1907/2006) - Community Rolling Action Plan (CoRAP) List of Substances, EU - REACH (1907/2006) - List of Pre-registered Substances, EU - REACH (1907/2006) - List of Registered Substances, EU - REACH (1907/2006) - Registered Substances Considered not to be PBT/vPvB, EU - REACH (1907/2006) - Registered Substances PBT/vPvB Assessment Does Not Apply
 - Sales confidential component : Not applicable

16. OTHER INFORMATION

- 1) Reference
 - ACGIH, EU CLP, IARC, OSHA, SIAM, Publication
 - Notice of Employment and Labor
- 2) Issue date : 2022-01-13
- 3) Revision date
 - Last revised date : 2022-01-13

4) Other

This safety data sheet (SDS) is based on the legal provisions of the REACH Regulation (EC 1272/2008; article 31 and Annex II), as amended. Its contents are intended as a guide to the appropriate precautionary handling of the material. It is the responsibility of recipients of this SDS to ensure that the information contained therein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. Information and instructions provided in this SDS are based on the current state of scientific and technical knowledge at the date of issue indicated. It should not be construed as any guarantee of technical performance, suitability for particular applications, and does not establish a legally valid contractual relationship. This version of the SDS supersedes all previous versions.