# SAFETY DATA SHEET

## 1. IDENTIFICATION

| | | |
|---|---|---|
| Trademark | : | LEXAN™ resin |
| Product name | : | 505RU-7T3B4855 |
| Product code | : | 22204984 |
| Product description | : | Polycarbonate |
| Appearance | : | pellets |
| Recommended use | : | May be used to produce molded or extruded articles or as a component of other industrial products.<br>Manufacture of plastics products, including compounding and conversion |
| Restrictions on use | : | For industrial use only. |
| Supplier | : | SABIC Korea Ltd.<br>20th Floor Donghoon Tower<br>702-19, Yeoksam-Dong, Kangnam-ku<br>Seoul, 06151 Korea<br>Telephone: +82 2 510 6000 |
| Emergency SABIC Telephone # | : | Korea: +(82) 2 510 6595 |
| Emergency Transportation # | : | CHEMTREC, U.S. : (800) 424-9300<br>International: +1 (703) 527-3887 |
| E-mail address | : | sds.info@sabic.com |
| Website | : | http://www.sabic.com |

## 2. HAZARDS IDENTIFICATION

**GHS Remark**

The additives in this product (if any) are bound in a thermoplastic resin matrix. In accordance with GHS for the classification of the product, the hazard potential may be assessed with respect to the physico-chemical form and/or bioavailability of the individual components in the thermoplastic resin. UN GHS says, that even if adverse effects are seen in animal studies or in-vitro tests, no classification is needed if the mechanism or mode of action is not relevant to humans. The European CLP Regulation also mentions, that no classification is indicated if the mechanism is not relevant to humans. Where GHS classifications are shown below, these are based on the individual components in the thermoplastic resin matrix. Under the typical use conditions for the resin, these hazardous components are unlikely to contribute to workplace exposure. Please read the entire safety data sheet and/or consult an EHS professional for a complete understanding.

**GHS Classification**

Not a hazardous substance or mixture.

**GHS label elements**

Not a hazardous substance or mixture.

**Other hazards which do not result in classification**

No data available

**SABIC Emergency Overview**

Pellets with slight or no odor
Spilled material may create slipping hazard.
Can burn in a fire creating dense, toxic smoke
Molten plastic can cause severe thermal burns
Fumes produced during melt processing may cause eye, skin, and respiratory tract irritation. Severe over-exposure may result in nausea, headache, chills, and fever.
Secondary operations, such as grinding, sanding, or sawing can produce dust which may present an explosion or respiratory hazard.

**Other information**

OSHA, IARC and/or NTP have listed carbon, titanium dioxide, crystalline silica (quartz), respirable glass and certain heavy metals, present in some colorants and fillers, as carcinogens. If these materials are present in this product at significant quantities, they are shown in Section 2/3. These materials are essentially bound to the plastic matrix and are unlikely to contribute to workplace exposure under recommended processing conditions.

**Processing Issues**

Processing vapors may cause irritation to the eyes, skin, and respiratory tract. In cases of severe exposure, nausea and headache can also occur. Grease-like processing vapor condensates on ventilation ductwork, molds, and other surfaces can cause irritation and injury to skin.

**Aggravated Medical Condition**

MEDICAL RESTRICTIONS: There are no known health effects aggravated by exposure to this product. However, certain sensitive individuals and individuals with respiratory impairments may be affected by exposure to components in the processing vapors.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Mixture

**Components**

| Chemical name | Common Name | CAS-No. | Concentration (% w/w) |
|---|---|---|---|
| Glass Fiber | Glass, oxide, chemicals | 65997-17-3 | >= 5 - < 10 |
| Titanium Dioxide PW6 | titanium dioxide | 13463-67-7 | >= 1 - < 2.5 |

Components which are considered potential hazards to health or the environment, if present above minimum concentrations, are listed above. Any concentration shown as a range is to protect confidentiality and/or is due to batch variation. Any non-hazardous components are being withheld as a trade secret. This product consists primarily of high molecular weight polymers which are not expected to be hazardous. Furthermore, any additives in this product are present within the polymer matrix and are not expected to be hazardous under recommended use conditions. Occupational exposure limits, if available, are listed in Section 8.

## 4. FIRST AID MEASURES

| | | |
|---|---|---|
| General advice | : | Thermal decomposition can lead to release of irritating gases and vapours.<br>Move the victim to fresh air.<br>Obtain medical attention. |
| In case of eye contact | : | Immediately flush eye(s) with plenty of water.<br>Remove contact lenses, if present and easy to do. Continue rinsing.<br>If eye irritation persists, consult a specialist. |
| In case of skin contact | : | After contact with skin, wash immediately with plenty of cold water.<br>Wash off immediately with soap and plenty of water.<br>Consult a physician.<br>If skin irritation persists, call a physician. |
| If inhaled | : | Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion.<br>If symptoms persist, call a physician. |
| If swallowed | : | Negligible or unlikely exposure pathways<br>If accidentally swallowed obtain immediate medical attention. |
| Most important symptoms and effects, both acute and delayed | : | None known. |
| Notes to physician | : | No information available. |

## 5. FIREFIGHTING MEASURES

**Suitable and unsuitable extinguishing media**

| | | |
|---|---|---|
| Suitable extinguishing media | : | Use dry chemical, CO2, water spray or "alcohol" foam. Water is the best extinguishing medium. Carbon dioxide and dry chemical are not generally recommended because their lack of cooling capacity may permit re-ignition on larger resin fires (blobs, drools, etc.). |
| Unsuitable extinguishing media | : | Do not use a solid water stream as it may scatter and spread fire. |
| Specific hazards during firefighting | : | Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.<br>Material is not sensitive to mechanical impact. |
| Hazardous combustion products | : | Fire will produce dense black smoke containing hazardous combustion products, carbon oxides, hydrocarbon fragments.<br>If present, certain hazardous additives can also liberate halogenated hydrocarbons.<br><br>No hazardous combustion products are known |

| | | |
|---|---|---|
| Specific extinguishing methods | : | Take precautionary measures against static discharges.<br>During processing, dust may form explosive mixture in air.<br>Thermal decomposition can lead to release of irritating gases and vapours. |
| Special protective equipment for firefighters | : | Wear self-contained breathing apparatus for firefighting if necessary.<br>Stay upwind/ keep distance from source. |

## 6. ACCIDENTAL RELEASE MEASURES

| | | |
|---|---|---|
| Personal precautions, protective equipment and emergency procedures | : | Take precautionary measures against static discharges. |
| Environmental precautions | : | Do not flush into surface water or sanitary sewer system.<br>Should not be released into the environment.<br>SABIC is committed to implementing Responsible Care® and global sustainability programs (such as The Alliance to End Plastic Waste, Operation Clean Sweep®, etc.) throughout the value chain that are designed to prevent and address accidental releases into the environment. Accordingly, SABIC recommends implementation of systems and practices by downstream users to prevent and address incidental releases in order to protect the aquatic environment from potential (long term) negative effects of plastic materials. |
| Methods and materials for containment and cleaning up | : | Sweep up and shovel into suitable containers for disposal.<br>Do not create a powder cloud by using a brush or compressed air. |

## 7. HANDLING AND STORAGE

| | | |
|---|---|---|
| Advice on safe handling | : | Handle in accordance with good industrial hygiene and safety practice.<br>Provide for appropriate exhaust ventilation and dust collection at machinery.<br>Avoid dust formation.<br>All metal parts of the mixing and processing equipment must be earthed.<br>Open containers only in well-ventilated area. |
| Conditions for safe storage | : | Keep tightly closed in a dry and cool place.<br>Keep away from heat and sources of ignition.<br>Residual monomer vapors can accumulate in the headspace of closed containers. |

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Components with workplace control parameters**

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|---|---|---|---|---|
| Glass Fiber | 65997-17-3 | TWA (Dust) | 5 mg/m3 | KR OEL |
| | | TWA (particulate) | 5 mg/m3 | SABIC OEL: Occupational Exposure Limits |
| | | TWA (Fibrous dust) | 1 f/cc | SABIC OEL: Occupational Exposure Limits |
| | | TWA (fibres) | 1 fibres per cubic centimeter | ACGIH |
| | | TWA (Inhalable particulate matter) | 5 mg/m3 | ACGIH |
| | | TWA (fibres) | 1 fibres per cubic centimeter | ACGIH |
| | | TWA (fibres) | 1 fibres per cubic centimeter | ACGIH |
| Titanium Dioxide PW6 | 13463-67-7 | TWA | 10 mg/m3 | KR OEL |
| | Further information: Limited evidence of carcinogenicity in humans or animals, which is not sufficiently convincing to place the substance in Category 1 | | | |

Other ingredients, which are listed in section 3 but not listed in this section, do not have established occupational exposure limit values.

**Engineering measures** : Handle in accordance with good industrial hygiene and safety practice.
Provide appropriate exhaust ventilation at machinery.
Processing fume condensate may be a fire hazard and toxic; remove periodically from exhaust hoods, ductwork, and other surfaces using appropriate personal protection.

**Personal protective equipment. Among the following personal protective equipment, the PPEs which require safety certification need to be certified by KOSHA.**

Respiratory protection : Use adequate ventilation and/or engineering controls in high temperature processing to prevent exposure to vapours.
If dust or powder are produced from secondary operations such as sawing or grinding, use a respirator approved for protection from dust.

No personal respiratory protective equipment normally required.

Eye protection : Safety glasses with side-shields
Chemical resistant goggles must be worn.

Hand protection
Material : Wear protective gloves.

Skin and body protection : Long sleeved clothing

Protective measures : Wear suitable protective equipment.

| | | |
|---|---|---|
| Hygiene measures | : | Do not eat, drink or smoke when using this product. |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|---|---|---|
| Appearance | : | pellets |
| Colour | : | grey |
| Odour | : | none or slight |
| Odour Threshold | : | No information available. |
| pH | : | No data available |
| Melting point/ range | : | This product does not exhibit a sharp melting point but softens gradually over a wide range of temperatures. |
| Boiling point/boiling range | : | not determined |
| Flash point | : | Not applicable |
| Upper explosion limit / Upper flammability limit | : | not determined |
| Lower explosion limit / Lower flammability limit | : | not determined |
| Vapour pressure | : | negligible |
| Solubility(ies) | | |
| Water solubility | : | insoluble |
| Solubility in other solvents | : | not determined |
| Relative vapour density | : | not determined |
| Relative density | : | >1 (water = 1) |
| Density | : | not determined |
| Partition coefficient: n-octanol/water | : | No information available. |
| Auto-ignition temperature | : | 630 °C |
| Decomposition temperature | : | not determined |
| Viscosity | | |
| Viscosity, dynamic | : | Not applicable |
| Viscosity, kinematic | : | Not applicable |

| | | |
|---|---|---|
| Explosive properties | : | Not applicable |

## 10. STABILITY AND REACTIVITY

| | | |
|---|---|---|
| Chemical stability and possibility of hazardous reactions | : | No dangerous reaction known under conditions of normal use. |
| Conditions to avoid | : | To avoid thermal decomposition, do not overheat.<br>Heating can release hazardous gases.<br>Do not exceed melt temperature recommendations in product literature. Purgings of hot material should be collected in small, flat, thin shapes and quenched with water to allow for rapid cooling. Do not allow product to remain in barrel at elevated temperatures for extended periods of time. |
| Incompatible materials | : | No special restrictions on storage with other products. |
| Hazardous decomposition products | : | No hazardous decomposition products are known. |
| Hazardous decomposition products | : | Process vapors under recommended processing conditions may include trace levels of<br>hydrocarbons, phenols, alkylphenols, diarylcarbonates<br>If present, certain hazardous additives can also liberate halogens, hydrohalogen acids or halogenated hydrocarbons. |

## 11. TOXICOLOGICAL INFORMATION

| | | |
|---|---|---|
| Information on likely routes of exposure | : | No data available |

**Health hazard information**

**Acute toxicity**

**Product:**

| | | |
|---|---|---|
| Acute oral toxicity | : | Remarks: >5000 mg/kg (estimated) |
| Acute dermal toxicity | : | Remarks: >2000 mg/kg (estimated) |

**Skin corrosion/irritation**

No data available

**Serious eye damage/eye irritation**

No data available

**Respiratory or skin sensitisation**

**Respiratory sensitisation**

No data available

**Skin sensitisation**

No data available

**Carcinogenicity**

**Components:**

**Titanium Dioxide PW6:**
According to Ministry of Employment and Labor Public Notice: Category 2

**Germ cell mutagenicity**
No data available

**Reproductive toxicity**
No data available

**STOT - single exposure**
No data available

**STOT - repeated exposure**

**Components:**

**Glass Fiber:**
Target Organs : Eyes, Respiratory Tract, Skin

**Titanium Dioxide PW6:**
Target Organs : Lungs

**Repeated dose toxicity**
No data available

**Aspiration toxicity**
No data available

**Experience with human exposure**

**Product:**

| | | |
|---|---|---|
| Inhalation | : | Remarks: Inhalation unlikely due to physical form. Processing fumes evolved at recommended conditions may contain trace amounts of hazardous chemicals. Extreme processing conditions or temperatures may result in higher levels. Processing vapors may cause irritation to the eyes, skin, and respiratory tract. In cases of severe exposure, nausea and headache can also occur. Grease-like processing vapor condensates on ventilation duct work, molds, and other surfaces can cause irritation and injury to skin. |
| Skin contact | : | Remarks: Not a hazard during normal industrial use. If present, some additives (like glass fiber or flame retardants) may cause skin irritation in susceptible persons. |
| Eye contact | : | Remarks: Resin particles, like other inert materials, are mechanically irritating to eyes. |
| Ingestion | : | Remarks: Ingestion unlikely due to physical form. |

**Toxicology, Metabolism, Distribution**
No data available

**Neurological effects**
No data available

**Further information**

**Product:**
Remarks : The toxicological data has been taken from products of similar composition.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**
No data available

**Persistence and degradability**
No data available

**Bioaccumulative potential**
No data available

**Mobility in soil**
No data available

**Other adverse effects**

**Product:**
Additional ecological information : Do not flush into surface water or sanitary sewer system. Ecological injuries are not known or expected under normal use.

## 13. DISPOSAL CONSIDERATIONS

**Disposal methods**
Waste from residues : Waste must be classified and labelled prior to recycling or disposal.
Empty containers should be taken to an approved waste handling site for recycling or disposal.Where possible recycling is preferred to disposal or incineration.
SABIC is committed to implementing Responsible Care® and global sustainability programs (such as The Alliance to End Plastic Waste, Operation Clean Sweep®, etc.) throughout the value chain that are designed to prevent and address accidental releases into the environment. Accordingly, SABIC recommends implementation of systems and practices by downstream users to prevent and address incidental releases in order to protect the aquatic environment from potential (long term) negative effects of plastic materials.

Contaminated packaging : Where possible recycling is preferred to disposal or incineration.
Can be landfilled or incinerated, when in compliance with local regulations.

**Disposal precautions**

Dispose of contents and container according to wastes control act.

## 14. TRANSPORT INFORMATION

**International Regulations**

**UNRTDG**

| | | |
|---|---|---|
| UN number | : | Not applicable |
| Proper shipping name | : | Not applicable |
| Class | : | Not applicable |
| Subsidiary risk | : | Not applicable |
| Packing group | : | Not applicable |
| Labels | : | Not applicable |

**IATA-DGR**

| | | |
|---|---|---|
| UN/ID No. | : | Not applicable |
| Proper shipping name | : | Not applicable |
| Class | : | Not applicable |
| Subsidiary risk | : | Not applicable |
| Packing group | : | Not applicable |
| Labels | : | Not applicable |
| Packing instruction (cargo aircraft) | : | Not applicable |
| Packing instruction (passenger aircraft) | : | Not applicable |

**IMDG-Code**

| | | |
|---|---|---|
| UN number | : | Not applicable |
| Proper shipping name | : | Not applicable |
| Class | : | Not applicable |
| Subsidiary risk | : | Not applicable |
| Packing group | : | Not applicable |
| Labels | : | Not applicable |
| EmS Code | : | Not applicable |
| Marine pollutant | : | Not applicable |

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

**National Regulations**

Refer to section 15 for specific national regulation.

**Special precautions for user**

Not applicable

## 15. REGULATORY INFORMATION

SABIC is disclosing information on minor components in section 15 that, to the best of our knowledge, are based upon data from our raw material suppliers or manufacturers. Note that analysis of the raw materials and/or SABIC products for presence of these or other chemicals on a routine basis is neither part of our quality control plan, nor is it a part of our product specifications, and hence it shall not be construed as any warranty, expressed or implied. Chemical(s) listed in this section can be considered to be present with a concentration below 0.1 (% w/w), unless also appearing in section 3 where a higher concentration range may be displayed.

Further, this does not exclude presence of negligibly slight traces of other chemicals due to, amongst others, impurities or residuals in the components supplied by external parties and/or used in the production of such

components. It is the responsibility of the manufacturer or seller to confirm and establish compliance of the final product with local/country regulatory requirements. The information provided here is current as of the date of this document, based on data available to SABIC.

**National regulatory information**

**Regulation under the Occupational Safety and Health Act**

**Harmful Substances Prohibited from Manufacturing**

Not applicable

**Harmful Substances Required Permission for Manufacture**

Not applicable

**Harmful Agents to be kept below Occupational Exposure Limits**

| Chemical name | CAS-No. |
|---|---|
| Fibrous glass | 65997-17-3 |
| Titanium dioxide | 13463-67-7 |

**Harmful Agents Required to be kept below Permission Levels**

Not applicable

**Hazardous substances requiring management**

| Chemical name | CAS-No. | Threshold limits (%) |
|---|---|---|
| Titanium dioxide | 13463-67-7 | >= 1 % |

**Special Management Materials**

Not applicable

**Controlled Substances Subject to Environment Monitoring**

| Chemical name | CAS-No. | Threshold limits (%) |
|---|---|---|
| | 65997-17-3 | |
| Titanium dioxide | 13463-67-7 | >= 1 % |

**Controlled Substances Subject to Health Examination**

| Chemical name | CAS-No. | Threshold limits (%) |
|---|---|---|
| Glass fiber dusts | 65997-17-3 | |

**Regulation under the Chemicals Control Act**

**Toxic Chemicals**

Not applicable

**Restricted Chemicals**

Not applicable

**Prohibited Chemicals**

Not applicable

**Toxic Release Inventory**

Not applicable

**Accident Precaution Chemicals**

Not applicable

**Dangerous Substances Safety Management Act**

Not Applicable to Dangerous Materials

**Wastes Control Act**

Industrial general wastes
Follow article 13 of the act to dispose the product waste

**Other requirements in domestic and other countries**

**The components of this product are reported in the following inventories:**

| | | |
|---|---|---|
| TCSI(Taiwan) | : | Not in compliance with the inventory |
| TSCA(USA) | : | All substances listed as active on the TSCA inventory |
| AIIC(Australia) | : | Not in compliance with the inventory |
| DSL(Canada) | : | All components of this product are on the Canadian DSL |
| ENCS(Japan) | : | On the inventory, or in compliance with the inventory |
| KECI(Korea) | : | On the inventory, or in compliance with the inventory |
| PICCS(Philippines) | : | On the inventory, or in compliance with the inventory |
| IECSC(China) | : | On the inventory, or in compliance with the inventory |
| NZIoC(New Zealand) | : | On the inventory, or in compliance with the inventory |
| REACH(European Union) | : | If purchased in Europe, complies with No 1907/2006 (REACH) or is exempted. If not, please contact Supplier/Importer. |
| CH INV(Switzerland) | : | Exempted as long as EU-REACH conditions are met. For further information, please contact: Manufacture, Importer, Supplier. |
| CCA/ARECS | : | If purchased in S. Korea, complies with K-REACH or is exempted. If not, please contact Supplier/Importer. |
| CICR(Türkiye) | : | For further information, please contact: Manufacturer, importer, supplier |

## 16. OTHER INFORMATION

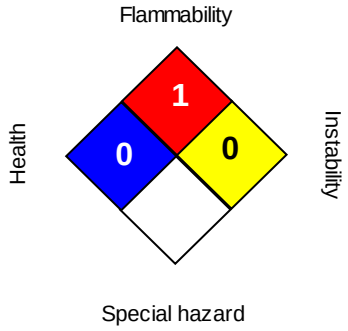
**Further information**

| | | |
|---|---|---|
| Issuing date | : | 12.06.2025 |

**Revision number and date**

| | | |
|---|---|---|
| Number of Revision | : | 0.1 |
| Registered trademark | : | SABIC and brands marked with ™ are trademarks of SABIC or its subsidiaries or affiliates. |
| Prepared by | : | Product Stewardship |

**NFPA:**




**HMIS III:**

| | |
|---|---|
| HEALTH | 0 |
| FLAMMABILITY | 1 |
| PHYSICAL HAZARD | 0 |

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Disclaimer

This Safety Data Sheet (SDS) information is provided based on the hazard communication regulations for the region or country in which the purchaser is located and for the use of the persons required to receive this information under those regulations. The information is neither designed nor recommended for any other use or for use by any other person, including for compliance with other laws. This SDS is valid and applicable only to this product as initially sold by us. This SDS is not valid unless it has been obtained directly from Saudi Basic Industries Corporation or any of its affiliates, or posted or viewed on a SABIC website. Modification of this SDS, unless specifically authorized by us, is strictly prohibited. This SDS is based on information that is believed to be reliable at the date of its issuance, but may be subject to change as new information becomes available. Because it is not possible to anticipate all conditions of use, each purchaser and user of this product is responsible for making its own determination as to: (i) the safe and proper handling of this product in its own particular use of this material; and (ii) the suitability of this product for the user's particular use. THE INFORMATION SET FORTH HEREIN DOES NOT CONSTITUTE OR CREATE ANY REPRESENTATION OR WARRANTY, EITHER EXPRESS OR IMPLIED, INCLUDING AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND DOES NOT ALTER OUR STANDARD CONDITIONS OF SALE.

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KR / EN

End of Safety Data Sheet