1. IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY

Trademark: LEXAN®
Product Code: 3412R-739-0-NOR
Product Description: Polycarbonate [CASRN 25971-63-5], glass fiber filled
Product Type: Commercial Product
Recommended use: May be used to produce molded or extruded articles or as a component of other industrial products.
Company: SABIC Innovative Plastics B.V.
Plasticslaan 1
P.O. Box 117
4600 AC Bergen op Zoom
The Netherlands
Manufacturer: SABIC Innovative Plastics B.V.
Plasticslaan 1
P.O. Box 117
4600 AC Bergen Op Zoom
The Netherlands
Emergency Telephone Number: Bergen op Zoom +31(0)164-292911 (24/24)
E-mail: webinquiries@sabic-ip.com
2. HAZARDS IDENTIFICATION

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. See below for additional effects.
- Secondary operations, such as grinding, sanding, or sawing can produce dust which may present an explosion or respiratory hazard.

Skin Contact: Contact causes skin irritation.

Eye Contact: Resin particles, like other inert materials, are mechanically irritating to eyes.

Inhalation: Irritating to respiratory system; avoid inhalation of dusts.

Ingestion: Pellet ingestion unlikely due to physical form.

Other Information: Cool skin rapidly with cold water after contact with molten material. Heating can release hazardous gases. Hazardous fumes can also occur in post-processing operations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Not a hazardous substance or preparation according to EC-directives 1999/45/EC and 1272/2008/EC unless indicated.

4. FIRST AID MEASURES

If Inhalation: Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. If symptoms persist, call a physician.

On skin contact: Immediately cool the skin by rinsing with cold water after contact with hot material. Wash off immediately with soap and plenty of water. Consult a physician.

On contact with eyes: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If eye irritation persists, consult a specialist.

On ingestion: No hazards which require special first aid measures.

Precautions: Cool molten product on skin with plenty of water. Do not remove solidified product. Do not peel polymer from the skin.
5. FIRE-FIGHTING MEASURES

Autoignition Temperature: 630°C (1166°F), estimated.

Explosive Limits

upper: Not determined
lower: Not determined

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 for Safety Reasons:

Do not use a solid water stream as it may scatter and spread fire.

Hazardous decomposition products:

Fire will produce dense black smoke containing hazardous combustion products, carbon oxides, hydrocarbons fragments, hydrogen fluoride, carbonyl fluoride, fluorocarbons.

Special Protective Equipment for Firefighters:

In the event of fire, wear self-contained breathing apparatus (NEN-EN137).

Specific Hazards:

Take precautionary measures against static discharges. During processing, dust may form explosive mixture in air. Thermal decomposition can lead to release of irritating gases and vapors.

6. ACCIDENTAL RELEASE MEASURES

Clean up:

Sweep up and shovel into suitable containers for disposal. Do not create a powder cloud by using a brush or compressed air.

Personal Precautions:

See section 8.

Environmental Precautions:

Do not flush into surface water or sanitary sewer system. Should not be released into the environment.

7. HANDLING AND STORAGE

Handling:

Handle in accordance with good industrial hygiene and safety practices. Provide for appropriate exhaust ventilation and dust collection at machinery. Avoid dust formation. All metal parts of the mixing and processing equipment must be earthed.

Storage:

Store in closed container in a dry and cool area. Keep away from heat sources and sources of ignition.
8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits: No components with information, unless noted below

Engineering Measures to Reduce Exposure: In the case of hazardous fumes, wear self contained breathing apparatus. Wear face-shield and protective suit for abnormal processing problems. Handle in accordance with good industrial hygiene and safety practice for diagnostics. Provide appropriate exhaust ventilation at machinery and at places where dust can be generated.

Hand Protection: Protective gloves should be worn, NEN-EN 374.

Eye Protection: Safety glasses with side-shields. (NEN-EN 165-166).

Respiratory Protection: In the case of hazardous fumes, wear self contained breathing apparatus. In case of insufficient ventilation wear suitable respiratory equipment. (NEN-EN149).


Hygiene Measures: When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid
Appearance: Pellets
Color: Same as color code
Odor: None

Melting point/range: Various
Autoignition Temperature: 630°C (1166°F) estimated
Vapor Pressure: Negligible

Water Solubility: Insoluble
Evaporation Rate: Negligible

Specific gravity: >1; (water = 1)
VOC content (%): Negligible

Explosive Limits
upper: Not determined
lower: Not determined
10. STABILITY AND REACTIVITY

Stability: Stable under ambient conditions. Hazardous polymerisation does not occur.

Conditions to Avoid: Avoid temperatures above 320°C. To avoid thermal decomposition, avoid elevated temperatures. Heating can result in the formation of gaseous decomposition products, some of which may be hazardous.

Hazardous Decomposition Products: Traces of phenols, alkylphenols, diarylcarbonates, carbonyl fluoride, hydrogen fluoride, fluorocarbons.

11. TOXICOLOGICAL INFORMATION

LD50/oral/rat: >5000 mg/kg
LD50/dermal/rabbit: >2000 mg/kg
Subchronic Toxicity: No information available
Primary Irritation: Skin irritation
IARC: Not listed
OSHA: Not regulated
NTP: Not tested
Remarks: The toxicological data has been taken from products of similar composition.

Special Studies: Carbon Black: The International Agency for Research on Cancer (IARC) has determined that carbon black is a class 2B known animal and possible human carcinogen by the route of inhalation. Rats exposed to high doses of carbon black by inhalation developed statistically significant increases in lung fibrosis and lung tumors. Carbon Black: The scientific discussions about the carcinogenic potential of inorganic low solubility particles (fine dust) including carbon black has not been concluded. Many inhalation toxicologists believe the lung fibrosis and tumors that developed in rats following exposure to carbon black result form massive accumulation of small dust particles that overwhelm the clearance mechanism and produce what is termed “lung overload,” an effect considered to be rat specific and not relevant to humans. In addition, based on epidemiological studies, no causal link between carbon black exposure and cancer risk in humans has been demonstrated.

12. ECOLOGICAL INFORMATION

Ecotoxicity Effects: Do not flush into surface water or sanitary sewer system.
Ecotoxicity - Invertebrate Data: Ecological damages are not known or expected under normal use.
Germany VCI (WGK): 0
13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products: Where possible recycling is preferred to disposal or incineration. Dispose of in accordance with local regulations.

EWC waste disposal no: 702 - waste from the manufacture, formulation, supply and use of plastics, synthetic rubber and man-made fibres.

14. TRANSPORT INFORMATION

Transport Classification: Not regulated as hazardous for shipment, unless noted below, under current transportation guidelines.

DOT

ADR/RID/ADN

IMDG

ICAO

IATA-DGR
15. REGULATORY INFORMATION

This substance is classified and labelled according to Annex I of Directive 67/548/EEC, as amended.

R -phrase(s)
S -phrase(s)

International Inventories:

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA (USA):</td>
<td>Listed</td>
</tr>
<tr>
<td>DSL (Canada):</td>
<td>Listed</td>
</tr>
<tr>
<td>EINECS/ELINCS (Europe):</td>
<td>Listed</td>
</tr>
<tr>
<td>ENCS (Japan):</td>
<td>Listed</td>
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<tr>
<td>IECSC (China):</td>
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<td>KECL (Korea):</td>
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<tr>
<td>PICCS (Philippines):</td>
<td>Listed</td>
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<tr>
<td>AICS (Australia):</td>
<td>Listed</td>
</tr>
<tr>
<td>NZIoC (New Zealand):</td>
<td>Listed</td>
</tr>
</tbody>
</table>

REACH Information: For this product's REACH related information, please contact webinquiries@sabic-ip.com

Other Inventory Information:
A "Listed" entry above means all chemical components are on the respective inventory list and/or a qualifying exemption exists for one or more components. A "Not listed" entry above indicates one or more components is restricted from import or manufacture into that country/region. Articles are exempt from registration and are therefore not listed on the national chemical inventories.

California Proposition 65:
Components in this product known to the State of California to cause cancer and/or reproductive effects, are listed below:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Weight %</th>
<th>California Proposition 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black 1333-86-4</td>
<td>0.1-1.0</td>
<td>Listed: February 21, 2003 Carcinogenic. (airborne, unbound particles of respirable size)</td>
</tr>
<tr>
<td>Fibrous Glass 65997-17-3</td>
<td>10-30</td>
<td>Listed: July 1, 1990 Carcinogenic. (airborne, unbound particles of respirable size)</td>
</tr>
</tbody>
</table>

RoHS EU Directive 2002/95/EC:
The subjected product is in compliance with EU RoHS Directive 2002/95/EC. All below chemicals are not employed in the manufacture of the product: a.Cadmium and its compounds, b.Lead and its compounds, c.Mercury and its compounds, d.Hexavalent chromium compounds, e.Polybrominated biphenyls (PBBs), f.Polybrominated diphenyl ethers (PBDEs including Deca-BDE). The trace levels of heavy metals may be present as impurities within threshold limits (<0.1% for Pb, Hg, Cr VI, and <0.01% for Cd). We are disclosing this information, to the best of our knowledge, based upon data from our raw material manufacturers.
16. OTHER INFORMATION

Text of R Phrases mentioned in Section 3

LEXAN® is a trademark of SABIC Innovative Plastics IP BV

MSDS Scope:
Europe: Conforms to Regulation (EC) No 1907/2006 (REACH)
This document is also applicable in other countries and regions.

Prepared by: Product Stewardship & Toxicology.

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End of Material Safety Data Sheet