



SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006 and 453/2010 (REACH)

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1. IDENTIFICATION OF THE SUBSTANCE AND COMPANY

| | |
|---|---|
| Trademark: | LEXAN™ |
| Product Code: | 920A - GY4G352 |
| Product Description: | Polycarbonate [CASRN 25971-63-5] flame retardant |
| 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) |
| Emergency Transportation/CHEMTREC (24 HOUR): | 800 424-9300 (USA) +1 703-527-3887 (globally, outside USA) |
| E-mail: | webinquiries@sabic.com |
| Website Address: | www.sabic.com |

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 bromide.

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.

Special Protective Equipment for Firefighters: In the event of fire, wear self-contained breathing apparatus (EU: NEN-EN137)

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. Material 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

| Chemical Name | Brazil NR15 | Argentina Annex III | ACGIH | US OSHA PEL (8 Hr) | SABIC Recommend (8 Hr)* |
|--------------------------------|----------------|---------------------|--|---|-------------------------|
| Titanium dioxide 13463-67-7 | No Information | No Information | TWA: 10 mg/m ³ ; Notations: Not Classifiable as a Human Carcinogen ; Crit Eff: Lower respiratory tract irritation | FRL_TWA: 5 mg/m ³ Respirable fraction , 10 mg/m ³ Total dust ; TL_PEL: 5 mg/m ³ Respirable fraction , 15 mg/m ³ Total dust | No Information |

*SABIC Recommended Exposure Limits have been established for certain chemicals.

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 practices. Provide for appropriate exhaust ventilation at machinery.

Hand Protection: Protective gloves should be worn. (EU: NEN-EN 374).

Eye Protection: Safety glasses with side-shields. (EU: 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. (EU: NEN-EN149).

Body Protection: Long sleeved clothing. (EU: NEN-EN 340-369-465).

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) |
| Explosive Limits | |
| upper: | Not determined |
| lower: | Not determined |
| VOC content (%): | Negligible |

10. STABILITY AND REACTIVITY

| | |
|--|---|
| Stability: | Stable under ambient conditions. Hazardous polymerization does not occur. |
| Conditions to Avoid: | Avoid temperatures above 630°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 phenol, alkylphenols, diarylcarbonates, hydrocarbons, Traces of, phenols, hydrogen bromide. |

11. TOXICOLOGICAL INFORMATION

| | |
|-----------------------------|---|
| LD50/oral/rat: | >5000 mg/kg |
| LD50/dermal/rabbit: | >2000 mg/kg |
| Subchronic Toxicity: | No information available |
| Primary Irritation: | Substance does not generally irritate and is only mildly irritating to the skin |
| IARC: | Not listed |
| OSHA: | Not regulated |
| NTP: | Not tested |
| Remarks: | The toxicological data has been taken from products of similar composition |
| Special Studies: | Titanium Dioxide: The International Agency for Research on Cancer (IARC) has determined titanium dioxide to be a possible human carcinogen (class 2B) based on evidence in experimental animals. Rats exposed to high doses of titanium dioxide by inhalation or intratracheal instillation showed an increased incidence of lung tumors. |

12. ECOLOGICAL INFORMATION

| | |
|---|--|
| Ecotoxicity Effects: | Do not flush into surface water or sanitary sewer system. |
| Other information: | Ecological damages are not known or expected under normal use. |
| Ecotoxicity - Invertebrate Data: | Ecological damages are not known or expected under normal use. |

13. DISPOSAL CONSIDERATIONS

| | |
|---|--|
| Waste from residues / unused products: | Where possible recycling is preferred to disposal or incineration. Descartar em conformidade com as legislação locais. |
| 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

ANTT 420

15. REGULATORY INFORMATION

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

International Inventories:

| | |
|--------------------------------|---|
| TSCA (USA): | Listed |
| DSL (Canada): | Listed |
| EINECS/ELINCS (Europe): | Listed |
| ENCS (Japan): | Listed |
| IECSC (China): | Listed |
| KECL (Korea): | Listed |
| PICCS (Philippines): | Listed |
| AICS (Australia): | Listed |
| NZIoC (New Zealand): | Listed |
| REACH Information: | For this product's REACH related information, please contact webinquiries@sabic.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.

SVHC (REACH Regulation (EC) No 1907/2006 and 453/2010, as amended):

This product does not intentionally contain SVHC chemicals except as noted below. Incidental amounts of impurities, if present, would be below the threshold limit of 0.1% by weight.

California Proposition 65:

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

| Chemical Name | Weight % | California Proposition 65: |
|--|-----------|--|
| Titanium dioxide 13463-67-7 | 1-5 | Listed: September 2, 2011 Carcinogenic. (airborne, unbound particles of respirable size) |
| cobalt-nickel-zinc-titanium dioxide spinel 68186-85-6 | 0.01-0.10 | Listed: May 7, 2004 Carcinogenic. (as nickel compounds) |
| Carbon black 1333-86-4 | 0.01-0.10 | Listed: February 21, 2003 Carcinogenic. (airborne, unbound particles of respirable size) |
| 4,4'-isopropylidenediphenol (bisphenol A) 80-05-7 | ≤100 ppm | Listed: May 11, 2015 Type of Toxicity: Female |
| Methylene chloride 75-09-2 | ≤ 10ppm | Type of Toxicity: cancer |

RoHS EU Directive 2011/65/EU:

The subject product is in compliance with EU RoHS Directive 2011/65/EU. 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.

HMIS Rating

Health: 0

Flammability: 1

Reactivity: 0

16. OTHER INFORMATION

SABIC and brands marked with ™ are trademarks of SABIC or its subsidiaries or affiliates.

Visit our public website to search, view and print Safety Data Sheets for commercial products:
<http://eur.sabic-ip.com/ordeur/pages/msds/MSDSSearch.jsp?app=sabic-ip>

SDS Scope:

Europe: Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 453/2010.
This document is also applicable in other countries and regions.

Prepared by: Product Stewardship & Toxicology

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End of Safety Data Sheet