

# MATERIAL SAFETY DATA SHEET Asia Pacific GHS Format

Print date: 10-Jan-2011 Revision Number: 4 Revision date: 09-Jan-2011

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Trade Name: LEXAN\*

Product Name: 940A -116 -PGNA

Product Description: Poly (bisphenol-A-carbonate) [CASRN 111211-39-3]

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 Japan LLC.

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# 2. HAZARDS IDENTIFICATION

Globally Harmonized System, UN(GHS) - Classification

**GHS Category** 

Not hazardous • Not classified

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# **GHS-Labeling**

GHS Labeling not required

#### **Precautionary Statements**

No GHS specific Precautionary Statements required - observe all other warnings and handling instructions in this MSDS.

#### Other hazards which do not result in classification:

#### **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. See below for additional effects.
- 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. 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 Conditions: 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

Product Type Mixture

If present, components listed above are physical or health hazards as defined in the Hazard Communication Standard. The quantities represent typical or average values for the materials shown. Additional compositional data are provided in Section 15, REGULATORY INFORMATION.

## 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:** Processing vapors inhalation may be irritating to the respiratory tract. If symptoms are

experienced remove victim from the source of contamination or move victim to fresh air and

obtain medical advice.

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# 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Water spray mist or foam.

Unsuitable extinguishing Media for safety reasons:

Carbon dioxide and dry chemical are not recommended because their lack of cooling capacity

may permit re-ignition.

**Hazards from Combustion** 

**Products:** 

Fire will produce dense black smoke containing hazardous combustion products, carbon

oxides, hydrocarbon fragments.

**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:

Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to

the potential of hazardous vapors and decomposition products.

**Exposure hazards:** Do not release chemically contaminated water into drains, soil or surface water. Sufficient

measures must be taken to retain the water used for extinguishing. Dispose of contaminated

water and soil according to local regulations.

# 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: See section 8.

Environmental Precautions: Do not flush into surface water or sanitary sewer system. Should not be released into the

environment.

Clean up: Sweep up and shovel into suitable containers for disposal. Do not create a powder cloud by

using a brush or compressed air.

# 7. HANDLING AND STORAGE

Handling: Handle in accordance with good industrial hygiene and safety practice. 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. Keep away from food, drink and animal feeding stuffs. Keep container tightly closed in

a dry and well-ventilated place.

Incompatible Products: Strong acids, strong oxidizing agents.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure limits:** No components with information, unless noted below

\*SABIC limit \*SABIC Innovative Plastics Recommended Exposure Limits have been established for certain chemicals.

Engineering Measures to Reduce Exposure:

Handle in accordance with good industrial hygiene and safety practice. Provide for 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.

Hand Protection: Protective gloves should be worn

Eye Protection: Safety glasses with side-shields or chemical goggles. In addition, use full-face shield when

cleaning processing vapor condensates from hood, ducts, and other surfaces.

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When using this product at elevated temperatures, implement engineering systems, **Respiratory Protection:** 

administrative controls or a respiratory protection program (including a respirator approved for protection from organic vapors, acid, gases, and particulate matter) if processing vapors are not adequately controlled or operators experience symptoms of overexposure. If dust of powder are produced from secondary operations such as sawing or grinding, use a respirator

approved for protection from dust.

Long sleeved clothing **Body Protection:** 

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

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid Appearance: Pellets Color: Varies

None or slight Odor: Odor Threshold:

No information available. Not applicable На

Melting point/range: This product does not exhibit a sharp melting point but softens gradually over a wide range of

temperatures.

Boiling point/range: Not applicable Not applicable Flash Point: **Evaporation Rate:** Negligible

Flammability (solid, gas):

Blend; neither component is flammable

**Explosive Limits** 

upper: Not determined lower: Not determined **Vapor Pressure:** Negligible

Vapor Density: No information available

Specific gravity: >1; (water = 1) Water Solubility: Insoluble

630°C (1166°F) estimated **Autoignition Temperature:** 

Dust may form explosive mixture in air **Explosive Properties:** 

**Oxidising Properties:** Not oxidising **Molecular Weight:** Polymer Nealiaible VOC content (%):

Surface tension: No data available

# 10. STABILITY AND REACTIVITY

Reactivity: Not reactive under recommended conditions of handling, storage, processing and use.

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

Polymerization: Hazardous polymerization 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. Do not exceed melt temperature recommendations in product literature. Purgings of hot material should be collected in small, flat, thin shapes and guenched with water to allow for rapid cooling. Do not allow product to remain in barrel at elevated

temperatures for extended periods of time.

Materials to Avoid: May react with strong oxidizing agents, strong acids or other highly reactive chemicals.

**Hazardous Decomposition** 

Process vapors under recommended processing conditions may include trace levels of **Products:** 

hydrocarbons, phenols, alkylphenols, diarylcarbonates.

# 11. TOXICOLOGICAL INFORMATION

#### **Acute Toxicity**

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# 11. TOXICOLOGICAL INFORMATION

**Product Information:** 

**LD50/oral/rat:** >5000 mg/kg **LD50/dermal/rabbit:** >2000 mg/kg

**Component Information:** 

Component Information Text: No data available

Sensitization

Respiratory Sensitization: Not classified

Irritation:

Eye Irritation: no data available

**Subchronic Toxicity (28 days)** 

Repeated Oral Toxicity(28d): No information available Repeated Dermal Toxicity(28d): No Information available Subchronic Toxicity: No information available

**Chronic Toxicity** 

Carcinogenicity: There are no known carcinogenic chemicals in this product except specifically mentioned

below.

Mutagenic Effects: No data is available on the product itself.

Reproductive Toxicity:

Developmental Toxicity:

No information available
No information available
No information available

Specific Target Organ Toxicity(STOT)

Target Organ Effects: Not established

**Aspiration Hazard** 

Aspiration Hazard Statement: No data available

Other relevant toxicity information

IARC: Not listed
OSHA: Not regulated
NTP: Not tested

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

Special Studies: No Information

# 12. ECOLOGICAL INFORMATION

**Ecotoxicity** 

Component Information:

100% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

**Product Information:** 

Persistence and Degradability

Biodegradation: Not inherently biodegradable

Partition coefficient (n-octanol/water)

Not established

**Bioaccumulative Potential:** 

Bioaccumulation: Not established

Mobility

Mobility: May be separated mechanically in waste water plants.

Other Adverse Effects

**Ecotoxicity Effects:** Do not flush into surface water or sanitary sewer system.

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# 13. DISPOSAL CONSIDERATIONS

products:

Waste from residues / unused Where possible recycling is preferred to disposal or incineration Dispose of in accordance with

local regulations

Empty containers should be transported/delivered using a registered waste carrier for local **Contaminated Packaging:** 

recycling or waste disposal.

Recycling is encouraged. Landfill or incinerate in accordance with federal, state and local **Waste Disposal:** 

requirements. Collected processing fume condensates and incinerator ash should be tested to

determine waste classification.

## 14. TRANSPORT INFORMATION

IMO / IMDG Not regulated

**ICAO** Not regulated

**IATA-DGR** Not regulated

DOT Not regulated

ADR/RID Not regulated

Not regulated ADR:

**ADN** Not regulated

## 15. REGULATORY INFORMATION

#### **International Inventories:**

TSCA (USA): Listed DSL(Canada): Listed **EINECS/ELINCS (Europe):** Listed Listed ENCS (Japan): IECSC(China): Listed KECL(Korea): Listed PICCS (Philippines): Listed AICS (Australia): Listed

# 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.

## SARA (313) Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and and Title 40 of the Code of Federal Regulations, Part 372.

## **SARA (311, 312) hazard class:**

Acute Health Hazard Ν **Chronic Health Hazard** Ν Fire Hazard Ν **Sudden Release of Pressure Hazard** Ν **Reactive Hazard** Ν

#### Canada:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

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#### WHMIS hazard class:

Non-controlled

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:	
Carbon black	<0.01	Listed: February 21, 2003	Carcinogenic. (airborne, unbound particles of
1333-86-4		respirable size)	

#### RoHS EU Directive 2002/95/EC:

This product complies with RoHS - it does not intentionally contain banned chemicals.

#### Remarks:

This product consists primarily of high molecular weight polymers which are not expected to be hazardous. The ingredients in this product are present within the polymer matrix and are not expected to be hazardous.

HMIS Rating Health: 0 Flammability: 1 Reactivity: 0

# **16. OTHER INFORMATION**

LEXAN\* is a registered trademark of SABIC Innovative Plastics IP BV

**Prepared by:** Product Stewardship & Toxicology.

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**End of Material Safety Data Sheet** 

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