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To : Idemitsu Chemicals Taiwan Corp.

QS No.:樹品証-12-0952

Issue of MSDS

The information about the following Product* is disclosed according to your request.

*IDEMITSU POLYCARBONATE TARFLON
"LEV2200KL"

Please refer to the attached MSDS of the Product*.

Sincerely yours,

Takanori Oshimi
Business Manager

MATERIAL SAFETY DATA SHEET

MSDS No. : PC-LEV####**T1-1

PREPARED DATE : November 30, 2012

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME :

IDEMITSU POLYCARBONATE LEV####** (#### :1700~2200, ** : Blank, KL)

NAME OF MANUFACTURER : Idemitsu Kosan Co., Ltd.

NAME OF SECTION : Performance Materials Department

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SECTION 2: HAZARD IDENTIFICATION

These materials are all under category as dangeous/harzadous substances.

SECTION 3: CONPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE/MIXTURE: MIXTURE

CHEMICAL NAME

CAS No.

NOMINAL %

Poly-(4,4'isopropyliden diphenyl carbonate)

25971-63-5

96.0 <

Proprietary ingredients

4.0 ≥

SYNONYM:

Poly Carbonate compound

CHEMICAL FORMULA:

[-O-C₆H₄-C(CH₃)₂-C₆H₄-O-CO-]_n

UNCLASS&UNNUMBER:

Not available

SECTION 4: FIRST AID MEASURES

EYE CONTACT :

Remove contact lenses at once. Immediately flush eyes with large quantities of water for at least 15 minutes. Get medical attention.

SKIN CONTACT:

If contact with molten product occurs, treat as for thermal burn. Do not try to peel molten polymer from the skin. Get medical attention promptly.

INHALATION :

Not likely to be inhaled due to physical form. For processing fume inhalation irritation, leave contaminated area and breathe fresh air. If coughing, difficult breathing or any other symptoms develop, get medical attention.

INGESTION :

Not a likely route of exposure. If person is conscious, give large amounts of water to drink. Induce vomiting. Get medical attention.

SECTION 5: FIRE FIGHTING MEASURES

FIRE FIGHTING :

Water spray is the preferred extinguishing medium. Use water spray to cool fire exposed surfaces, protect personnel, and extinguish the fire. Respiratory and eye protections are required for fire fighting personnel.

EXTINGUISHING MEDIA :

Water spray and foam. Carbon dioxide and dry chemical are not generally recommended because their lack of cooling capacity may permit re-ignition.

HAZARDOUS COMBUSTION PRODUCTS :

Combustion products may include intense heat and high levels of black smoke containing, carbon monoxide, carbon dioxide. Formation of traces of aliphatic and aromatic hydrocarbons, aldehyde, acids, phenol and phenol derivatives may occur.

FLASH POINT : Not applicable

LOWER FLAMMABLE LIMIT : Not applicable

UPPER FLAMMABLE LIMIT : Not applicable

AUTOIGNITION TEMPERATURE : 550 °C <

SECTION 6: ACCIDENTAL RELEASE MEASURES

GENERAL :

Sweep or gather up product and place in proper container for disposal or recovery. Don't exit to sewers and waterways, because fish may eat pellets and obstruct their digestive tracts.

SECTION 7: HANDLING AND STORAGE

HANDLING :

Prevent contact with skin and eyes. Use good industrial hygiene practices. Provide adequate ventilation. If product is powder and transported with air, make explosion relief provision.

STORAGE :

Store in a dry place away from moisture, excessive heat and sources of ignition.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA regulation 29CFR1910.1000 :

5 mg/m³(respirable dust), and 15mg/m³(total dust) based on OSHA PEL for nuisance dust.

ACGIH TLV :

A TWA of 10 mg/m³ (total dust) for nuisance dust.

VENTILATION :

A continuous supply of fresh air to the workplace together with removal of processing fumes through exhaust systems is recommended. Processing fumes may contain small amounts of carbon dioxide, diphenyl-carbonate, phenol and substituted phenols. Ventilation requirements must be locally determined to limit exposure to materials at their point of use.

PERSONAL PROTECTION

SKIN : No precaution other than clean body-covering clothing should be needed.

EYE : Safety glasses should be sufficient for most operations; however, for dusty operations or when handling solutions of the material, wear chemical goggles.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	: Solid
ODOR AND APPEARANCE	: Pellet
BOILING POINT	: Not Applicable
MELTING POINT	: 220 - 240 °C <
VAPOR PRESSURE (Torr)	: Negligible
VAPOR DENSITY (air=1)	: Not Applicable
SPECIFIC GRAVITY (Water=1)	: 1.1 - 1.3
pH	: Not Applicable
WATER SOLUBILITY	: Insoluble
VOLATILES	: Negligible

SECTION 10: STABILITY AND REACTIVITY

STABILITY :

Stable under recommended conditions of storage and handling.

REACTIVITY :

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

CONDITIONS & MATERIAL TO AVOID :

Attacked by strong oxidizing agents.

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE ORAL LD₅₀ : Not available

The components of this product are not hazardous under OSHA Hazard communication (29 CFR 1910.1200).

SECTION 12: ECOLOGICAL INFORMATION

Relevant information is not available.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL :

Efforts to recycle material should be made. If unable to use recycle, material should be buried in approved landfill or incinerated in accordance with all applicable with federal, state and local regulations.

SECTION 14: TRANSPORTATION INFORMATION

DOT HAZARD CLASS : Not Regulated
IDENTIFICATION NUMBER : Not Determined

SECTION 15: REGULATORY INFORMATION

This product complies with the Chemical Substance Inventory requirements of the US EPA Toxic Substances Control Act(TSCA).

SECTION 16: OTHER INFORMATION

The information contained herein is based on the data available to us and is believed to be correct. However, IDEMITSU KOSAN MAKES NO WARRANTY, EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. IDEMITSU KOSAN ASSUMES NO RESPONSIBILITY FOR INJURY FROM THE USE TO THE PRODUCT DESCRIBED HEREIN.

PREPARED BY
SAFETY, ENVIRONMENT & QUALITY ASSUARANCE DEPARTMENT
IDEMITSU KOSAN CO., LTD.