

Safety Data Sheet(SDS)

Last revised date: 26-12-2022

1. Identification

1) Product identifier: PC/ABS HP-1000XA

- 2) Recommended use of the chemical and restrictions on use
 - Recommended use of the chemical Others(Synthetic Resin Plastics)
 - Restrictions on use
 Use for recommended use only
- 3) Details of the supplier of the safety data sheet
 - Seller

Company name: Lotte Chemical Corporation

Address: 05551 Lotte World Tower, 300, Olympic-ro, Songpa-gu, Seoul, 05551 Rep. of KOREA

Telephone number:

| | Basic Chemicals | +82-2-829-4114 | Advanced Materials | +82-31-596-3114 | |
|-----|------------------------|-----------------|------------------------------------|-----------------|--|
| Eme | Emergency phone number | | | | |
| | Yeosu Plant | +82-61-688-2100 | Ulsan Plant | +82-52-278-3500 | |
| | Daesan Plant | +82-41-689-5900 | Yeosu Plant(Advanced Materials) | +82-61-689-1100 | |

Fax number: +82-2-834-6070

2. Hazards identification

- 1) Hazard classification
 - Not applicable
- 2) Allocation label elements

Hazard pictograms

- Not applicable

Signal word

- NONE

Hazard statements

- Not applicable

Precautionary statements

- Not applicable

3) Other hazards:

According to experience and information provided, this product does not affect harmful effects when using and handling it as a regulation.

3. Composition/Information on ingredients

| Chemical name | Common name | CAS No. | Content(wt%) |
|--|--|------------|--------------|
| isopropylidenediphenyl carbonate | Poly[oxycarbonyloxy-1,4- phenylene(1- methylethylidene)-1,4- phenylene] | 24936-68-3 | >=60 ~ <=70 |
| 2-Propenenitrile polymer with 1,3-butadiene and ethenylbenzene | ABS Resin | 9003-56-9 | >=30 ~ <=40 |
| Addtive | - | | >=0.1 ~ <=2 |

4. First-aid measures

- 1) Following eye contact
 - Call a physician immediately.
- 2) Following skin contact
 - Get medical attention if irritation develops and persists.
 - Remove contaminated clothing and shoes.
- 3) Following inhalation
 - If symptoms persist, call a physician.
 - Move to fresh air.
- 4) Following ingestion
 - If accidentally swallowed obtain immediate medical attention.
- 5) Delayed and immediate effects and also chronic effects from short and long term exposure No data available
- 6) Advice to physician
 - In the case of accident or if you feel unwell, seek medical advice immediately.

5. Fire-Fighting measures

- 1) Suitable (and unsuitable) extinguishing media
 - O Suitable extinguishing media
 - Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
 - Unsuitable extinguishing media
 - Do not use a solid water stream as it may scatter and spread fire.
- 2) Special hazards arising from the substance or mixture
 - o Pyrolytic product
 - No data available
 - O Risk of fire and explosion
 - Heating or fire can release toxic gas.
 - o Other
 - May cause toxic effects if inhaled.
- 3) Special protective equipment for firefighters
 - In the event of fire, wear self-contained breathing apparatus.

6. Accident release measures

- 1) Personal precautions, protective equipment and emergency procedures
 - Avoid dust formation.
- 2) Environmental precautions
 - Try to prevent the material from entering drains or water courses.
- 3) Methods and materials for containment and cleaning up
 - Keep in suitable, closed containers for disposal.
 - Pick up and arrange disposal without creating dust.

7. Handling and storage

- 1) Precautions for safe handling
 - For personal protection see section 8.
 - Smoking, eating and drinking should be prohibited in the application area.
- 2) Conditions for safe storage (including any incompatibilities)
 - Please note that materials and conditions to be avoided.
 - Store in a dry place. Store in a closed container.

8. Exposure controls & personal protection

- 1) Chemical exposure limits, Biological exposure standard
 - Contains no substances with occupational exposure limit values.
- 2) Appropriate engineering controls
 - Ensure adequate ventilation and exhaust ventilation at the workplace.
- 3) Personal protective equipment
 - Respiratory protection
 - If you have a direct contact or exposed to the material, wear the appropriate form of respiratory protection certified.
 - Eye protection
 - If the work environment or activity involves dusty conditions, mists or aerosols, wear the appropriate goggles.
 - Hand protection
 - Wear chemical safety gloves.
 - Skin protection
 - Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

9. Physical and chemical information

| Property name | Values | Source |
|--|---------------------------|--------|
| Appearance | | |
| Physical state | Soild | |
| Color | Depends on customer needs | |
| Odor | Odorless | |
| Odor threshold | No data available | |
| рН | No data available | |
| Melting point/freezing point | No data available | |
| Initial boiling point and boiling range(°C) | No data available | |
| Flash point(°C) | No data available | |
| Evaporation rate | No data available | |
| Flammability(solid, gas) | No data available | |
| Upper/lower flammability or explosive limits | No data available | |
| Vapour pressure | No data available | |
| Solubility(ies) | Insolubility | |
| Vapour density | No data available | |
| Relative density | No data available | |
| n-octanol/water partition coefficient | No data available | |

| Auto ignition temperature | Auto ignition temperature No data available | |
|---------------------------|---|--|
| | 400 °C over | |
| Decomposition temperature | 400 °C over | |
| Viscosity(mm²/s, 40°C) | No data available | |
| Molecular weight(mass) | No data available | |
| Specific gravity | 1.10 - 1.30 | |

10. Stability and reactivity

- 1) Chemical stability and Possibility of hazardous reactions
 - No decomposition if stored and applied as directed.
 - Stable at normal ambient temperature and pressure.
- 2) Conditions to avoid
 - Follow precautionary advice and avoid incompatible materials and conditions
- 3) Incompatible materials
 - Combustible material
- 4) Hazardous decomposition products
 - This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regula

11. Toxicological information

- 1) Information on the likely routes of exposure
 - No data available
- 2) Health hazard information
 - Acute toxicity
 - Acute toxicity(Oral) PRODUCT : Not classified
 - No data available
 - Acute toxicity(Dermal) PRODUCT: Not classified
 - No data available
 - Acute toxicity(Inhalation:Gases) PRODUCT : Not classified
 - No data available
 - Acute toxicity(Inhalation:Vapours) PRODUCT: Not classified
 - No data available
 - Acute toxicity(Inhalation:Dust/mist)
 PRODUCT : Not classified
 - No data available

- O Skin corrosion/irritation PRODUCT: Not classified
 - No data available
- o Serious eye damage/eye irritation PRODUCT : Not classified
 - No data available
- o Respiratory sensitization PRODUCT : Not classified
 - No data available
- O Skin sensitization PRODUCT: Not classified
 - No data available
- o Carcinogenicity PRODUCT : Not classified
 - No data available
- o Germ cell mutagenicity PRODUCT : Not classified
 - No data available
- o Reproductive toxicity PRODUCT : Not classified
 - No data available
- o Specific target organ toxicity single exposure PRODUCT : Not classified
 - No data available
- o Specific target organ toxicity repeated exposure PRODUCT : Not classified
 - No data available
- Aspiration hazard PRODUCT : Not classified
 - No data available

12. Ecological information

- 1) Ecotoxicity
 - Fish
 - 2-Propenenitrile polymer with 1,3-butadiene and ethenylbenzene
 - : LC50 11.5 mg / ℓ 96 hr Pimephales promelas
 - Crustaceans

No data available

Aquatic algae

No data available

2) Persistence and degradability

No data available

3) Bioaccumulative potential

No data available

4) Mobility in soil

No data available

5) Other adverse effects

13. Disposal considerations

- 1) Disposal methods
 - Empty containers should be taken to an approved waste handling site for recycling or disposal.
- 2) Precautions (including disposal of contaminated container of package)
 - Dispose of in accordance with local regulations.
 - Send to a licensed waste management company.

14. Transport information

1) UN No.: Not applicable

2) Proper shipping name: Not applicable

3) Hazard class: Not applicable

4) Packing group: Not applicable

5) Marine pollutant: No

6) Special precautions for user related to transport or transportation measures :

Emergency measures in case of fire: Not applicable

Emergency measures in the effluent: Not applicable

- ADR

· Tunnel restriction code : Not applicable

- IMDG

· Marine pollutant : No

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- Air transport(IATA)

· UN No.: Not applicable

· Proper shipping name : Not applicable

· Class or division : Not applicable

· Packing group : Not applicable

15. Regulatory information

Australia Industrial Chemicals Act

- Not applicable

China Inventory of Existing Chemical Substances (IECSC)

• Inventory - China - Inventory of Existing Chemical Substances (IECSC)

- Poly-4, 4'-isopropylidenediphenyl carbonate: Present [21562]
- 2-Propenenitrile polymer with 1,3-butadiene and ethenylbenzene: Present [03641]

92/32/EEC

- Not applicable

European Union Official Journal of the European Communities 15 June 1990 - Annex Based on Article 13 of Directive 67/548/EEC Amended by Directive 79/831/EEC

- Not applicable

Japan Law Concerning the Examination and Regulations of Manufacture, etc. of Chemical Substances

- Inventory Japan Existing and New Chemical Substances (ENCS)
- Poly-4, 4'-isopropylidenediphenyl carbonate: (7)-738
- 2-Propenenitrile polymer with 1,3-butadiene and ethenylbenzene : (6)-176

New Zealand Environmental Protection Authority, Inventory of Chemicals

- Inventory New Zealand Inventory of Chemicals (NZIoC)
- Poly-4, 4'-isopropylidenediphenyl carbonate : May be used as a single component chemical under an appropriate group standard
- 2-Propenenitrile polymer with 1,3-butadiene and ethenylbenzene : May be used as a single component chemical under an appropriate group standard

Turkey Regulation on Inventory and Control of Chemicals

- Not applicable

Taiwan Chemical Substance Inventory

- Inventory Taiwan Taiwan Chemical Substance Inventory (TCSI)
- Poly-4, 4'-isopropylidenediphenyl carbonate: Present
- 2-Propenenitrile polymer with 1,3-butadiene and ethenylbenzene : Present

Vietnam National Chemicals Inventory (NCI)

- Inventory Vietnam National Chemicals Inventory (NCI) (DRAFT)
- Poly-4, 4'-isopropylidenediphenyl carbonate: Present 15829
- 2-Propenenitrile polymer with 1,3-butadiene and ethenylbenzene: Present 12125

16. Other information

1) Reference

NCIS, KOSHA, Montreal Protocol, ECHA, OECD SIDS, EU IUCLID, HSDB(PubChem), NITE, NTP, ACGIH, IARC, NIOSH, ChemIDplus, EPA, EPI Suite, INCHEM

2) Issue date: 26-12-2022

3) Revision date

○ Revised date count : 2-1

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