SAFETY DATA SHEET

Original issued: Apr./01/1999 Revised ver08E: April/01/2017

1. Product(s) and Company Identification

Products name: Plastic Optical Fiber

Eska, Super Eska, Eska Premier, Eska Mega(Diameter≥ 250µ)

Company name: Mitsubishi Chemical Corporation

Address: 1-1, Marunouchi 1-chome, Chiyoda-Ku, Tokyo 100-8251, Japan Section in charge: MMA Business Domain, MMA Planning Dept., Technical Group

Telephone: +81-3-6748-7526
FAX: +81-3-3286-1418
Emergency assistance same as above
Document ID number SJEB-PMMA-08E

2. Hazardous Ingredients

GHS classification No classification

This produc is a "molded product(article)" and is not applied a classification of chemical Based on "Globally Harmonized System of Classification and Labeling of Chemicais".)

Physical and chemical hazard This product is a flammable solid and will burn if an ignition source is present..

Dust from this product has dust explosiveness.

Health Hazard The pyrolysis gas may irritate the eyes or the respiratory system or cause symptoms

such as dizziness, nausea and headache. Wear protective equipment to prevent broken

or chipped pieces of the product from entering the eyes or being inhaled.

3. Chemical Composition, Material Information

Classification: Article

Chemical name: Polymethylmethacrylate (PMMA) / Fluorinated resin

Ingredients and contents: PMMA 88-99%

Official Gazette ID No.: (6)-524 (The law concerning "Examination and Regulation of Manufacturer, etc. of Chemical Substances" and "The Industrial Safety and Health Law")

CAS No. 9011-14-7

Fluorinated resin: no-disclosure

4. First Aid Measures

Skin: No adverse effects anticipated by this route of exposure

Eye: Immediately flush with copious amounts of water. If itching or any unusual sensation

develops, get prompt medical attention.

Swallowing: The oral toxicity is low. Observe a symptom and get medical attention.

Don't let victim vomit forcibly. When possible, give around one or two cups of water

or milk. If unconscious, do not give anything

5. Fire Fighting Measures

Fire-fighting measures: Wear self-contained breathing apparatus in the case that toxic gas, such as carbon

monoxide and/or methylmethacrylate may be produced.

Extinguishing media: Water fog, foam and water spray, dry-chemical or carbon dioxide

6. Accidental Release Measures

Immediately keep away from sources of ignition, sweep up and discard in proper measures.

7. Handling & Storage Measures

Handling: Keep away from sources of ignition

Storage: Avoid ignition source and direct sun exposure

8. Exposure Controls/ Personal Protection

Control concentricity: Not applicable

Allowed concentricity: Not applicable

9. Physical & Chemical Properties

Appearance: solid

pH: Not applicable Flash point: Over 400°C

Physical transition temperature

Melting point: No explicit melting point observed, gradually soften in the temperature range from

130°C to 150°C

Decomposition temperature: Approximately 300°C

Specific gravity: 1.19

Solubility: Insoluble in water, soluble in organic solution such as chloroform

10. Stability & Reactivity

Stability: Stable under normal condition

Hazardous decomposition product:

There is not hazardous property in the normal condition. But By heating over 300°C, PMMA can be decomposed into methylmethacrylate which is slightly toxic. The methylmethacrylate monomer gas may irritate eyes and/or respiratory organs, or may cause unpleasant symptom such as dizziness, vomiting or headache. Heating may also produce corrosive HF

gas.

11. Toxicological Information

Acute toxicity: No data

Biologically and ecologically inactive, no effects anticipated.

12. Ecological Information

Biodegradability: No data
Bioaccumulation: No data
Fish toxicity: No data

Environmental effects: Do not discard in oceans, rivers, lakes or ponds to avoid aquatic animals and birds to eat the

disposals.

13. Disposal consideration

Scrap of the products may be incinerated or land filled under properly controlled conditions. The incineration facility should have appropriate acid endurable furnace with counteracting functionality against fluorinated acid gas to avoid the effects of the toxic gas that can be generated from fluorinated resins. Observe the law(s) and the local regulation(s) that shall be applied.

Combustion energy of Polymethylmethacrylate: 26.3kJ/g according to the measurement by Mitsubishi Chemical.

14. Transport Information

United nations classification and Serial No: Not applicable

Precautions: Handle with proper attention to avoid damaging the packages. Avoid sun exposure, water

soaking, moisture exposure and high temperature.

15. Regulatory Information

Fire service law Flammable resins (>3,000kg)

PRTR Not applicable

16. Other Information

None

Precautions

Do not use this product as follows.

Use for medical or pharmaceutical applications

Use in direct contact with food

If you use this product for these applications, please use it on your own responsibility.

This SDS (Safety Data Sheet) may be revised by newly obtained data or information, although the document is based on reliable academic and industrial information and data, which are available at the time prepared.

This SDS is the English version of the corresponding version of Japanese laws. When using this products, please check the local laws and regulations of the imported country.

The precautions described in the SDS, are applied to those case of the normal handlings and conditions. For each specific case, depending on each application, please consult with manufacturer or take appropriate actions based on proper evaluations of safety concerning the products by the users themselves, in advance.

Please understand that unknown risk or toxicity information regarding the products at the time the SDS prepared may become known or revealed in the future.

The intention of the SDS is to supply safety information, and NOT to guarantee the life or health of the person that handles the product(s), neither responsibility to compensation of the property damage or loss concerning the use of the product(s).

The user of the product(s) is responsible to the safety of the applications of the products and will consider the law(s), regulation(s) and/or product specifications, which should be applied to the products and its applications.

When using this product outside Japan, please confirm the latest laws and regulations to importers.

Risk level, physical & chemical properties and toxicity parameters described in the SDS do not imply the guarantee of the performance and/or functionality of the products, by the manufacturer.

Please contact manufacturer or contact person appeared in the top page, if users have any questionnaires regarding the SDS.