

MATERIAL SAFETY DATA SHEET

1. Manufacturer Information:

Product name : SUPERIO UT Type E
Company : Mitsubishi Plastics, Inc.
Address : Mitsubishi Jushi Bldg., 1-2-2 Nihonbashihongokucho,
Chuo-ku, Tokyo 103-0021, Japan
Department in charge : Electronics & High Performance Materials Dep.
Tel. : +81-3- 3279-3042
Fax. : +81-3-3279-6677
Mail address : mpi7951@cc.mpi.co.jp
Emergency phone No. : +81-3- 3279-3042

No. 781-003

Revision : November 25, 2008

2. Summary of hazardous and toxicity

Name of classification : Not applicable
Physical and chemical hazards : Not applicable
Adverse human health effects : Not applicable
Ecological effect : Not applicable

3. Composition and ingredient

Single or mixture : Single
Chemical name : Polyether imide
Official gazette serial No. (Chemical Substances Control Law) : (7) - 2 1 6 4
(Workers' safety and Health Law) : Not applicable

Ingredient & content:

Ingredient:	Content	CAS No.
Polyether imide	100%	61128-46-9

Chemical formula : $(C_{37}H_{24}O_6N_2)_n$

4. First aid measures:

Eye contact : Immediately wash with fresh water and ask for medical help if abnormal feeling occurs.
Skin contact : In case of molten material, thoroughly cool off with plenty of water immediately. Obtain medical if suffering from burn.
Inhalation : The ingredient may not be hazardous but if abnormal feeling occurs, ask for medical help.
Ingestion : Vomit as soon as possible. Ask for medical help if large amount is ingested.

5. Fire fighting

- Extinguishing method : Use the same fire fighting procedures as for general fire.
Extinguishing media : Water, water spray but water is more desirable to use as it has large cooling effect.
Accidental spillage media : Wipe off and recover all of it for preventing the slippage.

6. Accidental release measures

- Precaution to a human being : As this is solid having certain shape, not applicable.
Precaution to environment : All leakage of the product shall be promptly collected, because it is persistent under natural environment.

7. Caution upon handling and storage

- Handling : Care should be taken to prevent the rolled products from falling. Be careful the product may accumulate static electricity. It is desirable to use suitable gloves, etc. as the cut edge may be very sharp.
Storage : Store inside of warehouse avoiding moisture and direct sunshine. Prevent cargo breaks loose and ordinary caution should be taken such as to store away from the fire source.

8. Exposure limitation

- Concentration limit (Ministry of Labor standard) : Not specified.
Allowable concentration (Japan Industrial Hygiene) : Not specified.
Facilities measures : The installation of appropriate local ventilation facilities is desirable in case of secondary fabrication at high temperature.
Protective gears:
Respiration gears : Not required
Goggles : Not required
Protective gloves : Not required
Protective clothes : Not required

9. Physical & Chemical properties:

- Appearance : Film
Boiling point : Not applicable
Vapor pressure : Not soluble
Volatile liquids : None
Density : Approx. 1.27 (15°C) (polyether imide)
Solubility in organic solvents : Not soluble
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10. Hazards identification (Stability & Reactivity)

Flash point	: Not applicable
Ignition point	: 500°C or higher
Explosion limit	: Upper: No data Lower: No data
Combustibility	: Non-combustible at oxygen index of 26 or more Inflammable (polyether imide resin)
Ignitibility: (Spontaneous combustibility or reactivity with water)	: None
Stability/reactivity	: Stable in normal storage and handling and has no reactivity
Oxidizability	: None
Spontaneous reactivity/ volatility	: None
Dust explosiveness	: None
Stability, reactivity	: Stable at ambient temperature and pressure

11. Toxicological information

Skin corrosiveness	: No knowledge
Irritant (skin, eye)	: No knowledge
Sensitization	: No knowledge
Acute toxicity (including 50% fatal dosage)	: No knowledge
Sub-acute toxicity	: No knowledge
Chronic toxicity	: No knowledge
Carcinogen	: No knowledge
Mutagenicity (micro-organ, chromosome aberration)	: No knowledge
Reproductive toxicity	: No knowledge
Teratogenicity	: No knowledge
Others (such as generating toxic gas by reacting with water and so on):	Not available

12. Ecological information

Biodegradability	: None
Bioaccumulation	: None
Fish toxicity	: None
Other information on eco-toxicity	: None

13. Caution upon disposal

The method of release, disposal shall be in accordance with “Law regarding the disposal and cleaning of waste material” or applicable laws and regulation of local government..

14. Caution upon transportation

As this is heavy, care should be taken to prevent the cargo from breaking loose. In order not to break the packing bag or box, avoid the wetting or rough handling..

15. Applicable law

“Law regarding the disposal and cleaning of waste material” (Industrial waste, waste plastics)

16. Utilization of above information

The above description has been prepared based on the latest data available. But, the physical properties, hazardous and toxicological information are not guarantee data. The cautions are mentioned for the case of normal handing. In the case of special handling, please apply safety precaution in consideration of application and method of using.

MATERIAL SAFETY DATA SHEET

1. Manufacturer Information:

Product name : SUPERIO UT Type F
Company : Mitsubishi Plastics, Inc.
Address : Mitsubishi Jushi Bldg., 1-2-2 Nihonbashihongokucho,
Chuo-ku Tokyo, 100-0005, Japan
Department in charge : Electronics & High Performance Materials Dep.
Tel. : +81-3- 3279-3042
Fax. : +81-3-3279-6677
Mail address : mpi7951@cc.mpi.co.jp
Emergency phone No. : +81-3- 3279-3042

No. 781-004

Revision : November 25, 2008

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2. Summary of hazardous and toxicity

Name of classification : Not applicable
Physical and chemical hazards : Not applicable
Adverse human health effects : Not applicable
Ecological effect : Not applicable

3. Composition and ingredient

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Chemical name : Polyether imide
Official gazette serial No. (Chemical Substances Control Law) : (7) - 2 3 5 0
(Workers' safety and Health Law) : Not applicable

Ingredient & content:

Ingredient:	Content	CAS No.
Polyether imide	100%	61128-47-0

Chemical formula : $(C_{37}H_{24}O_6N_2)_n$

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Eye contact : Immediately wash with fresh water and ask for medical help if abnormal feeling occurs.
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