



**BL2338R AND BL2340R  
RoHS Compliance Certificate -  
Detailed**

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**Certificate**

Version 1.00

# Important Notice

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# Products

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Product P/N	Description	Fujitsu P/N
<b>BL2338R</b>	GPON ONT SoC - 2488Mbps downstream and 1244Mbps upstream ( SFU performance optimized)- RoHS compliant	<b>FJ MB87Q2070PB-GE1</b>
<b>BL2340R</b>	GPON ONT SoC - 2488Mbps downstream and 1244Mbps upstream (MxU performance optimized)- RoHS compliant	<b>FJ MB87Q2170PB-GE1</b>



Fujitsu Limited  
Akiruno Technology Center  
50 Fuchigami, Akiruno-shi, Tokyo, Japan, 197-0833

Dear Sir:

Fujitsu hereby declares that our Green Package products as distinguished by part number with an affix of "E1" marked by Fujitsu or under Fujitsu's authorization, delivered to your company (including your subsidiaries and affiliated companies if so requested and delivered directly or indirectly by Fujitsu (including Fujitsu's subsidiaries or affiliated companies) free from any of the substances listed below or in compliance with Fujitsu's Green Package policies.

1. Heavy metals
  - a. Cadmium and cadmium compounds
  - b. Lead and lead compounds
  - c. Mercury and mercury compounds
  - d. Hexavalent chromium compounds
2. Chlorinated organic compounds
  - a. Polychlorinated biphenyl (PCB)
  - b. Polychlorinated naphthalenes (PCN)
  - c. Chlorinated paraffins (CP)
  - d. Mirex (Perchlordecone)
  - e. Other chlorinated organic compounds
3. Brominated organic compounds
  - a. Polybrominated biphenyls (PBB)
  - b. Polybrominated diphenylethers (PBDE)
  - c. Tetrabromobisphenol-A-bis-(2,3-dibromopropylether) (TBBP-A-bis)
  - d. Other brominated organic compounds
4. Organic tin compounds (Tributyltin compound & Triphenyltin compound)
5. Asbestos
6. Azo compounds
7. Formaldehyde
8. Polyvinyl chloride (PVC) and PVC blends

Name: Koji Nomaki  
Title: Manager  
Date: January 6, 2006

## SAFETY DATA SHEET

PRODUCT NAME :  
 MSDS NO. :  
 DATE PREPARED : SEP. 9,2002 according to 2001/58/EC

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION		
PRODUCT NAME	:	
CHEMICAL NATURE	: EPOXY MOLDING COMPOUND	
MANUFACTURER	:	
	PHONE :	
SUPPLIER	:	
	PHONE :	
EMERGENCY ASSISTANCE(Please contact any of manufacture's following sales offices)		
NAME & EMERGENCY PHONE NUMBER	ADDRESS	
PHONE :		
PHONE :		
PHONE		
CHEMTREC PHONE :		
24 hours EVERYDAY		
2. COMPOSITION/INFORMATION ON INGREDIENTS		
COMPONENTS	(CAS NO.)	BY WEIGHT (%)
Silica Fused	(60676-86-0)	75 - 95
Epoxy Resin A	( Trade secret )	1 - 5
Epoxy Resin B	( Trade secret )	1 - 5
Phenol Resin A	( Trade secret )	1 - 5
Phenol Resin B	( Trade secret )	1 - 5
Metal Hydroxide	( Trade secret )	0.5 - 2.5
Carbon Black	(1333-86-4)	0.1 - 0.5
Labeling according to EC directives No symbol and risk phrase are required.		
3. HAZARDS IDENTIFICATION		
-- EMERGENCY OVERVIEW --		
Black tablet with slight antiseptic odor. Prolonged exposure may cause skin irritation. Self extinguishing and not ordinarily an emergency problem. Epoxy Resin A is a substrate known to be positive by Ames test. Water, foam, carbon dioxide and dry chemicals can be used on fire.		

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<b>POTENTIAL HEALTH EFFECTS :</b>	
EYE	: Solid or dusts may cause irritation or corneal injury due to mechanical action.
SKIN	: Prolonged exposure may cause skin irritation. A single, Prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts.
INGESTION	: Small amounts swallowed during normal handling operations are not likely to cause injury ; swallowing amounts larger than that may cause injury.
INHALATION	: May cause bronchitis (SiO <sub>2</sub> ).
<b>4. FIRST AID MEASURES</b>	
EYE CONTACT	: Flush affected eyes with large amount of water, also under the eyelids for at least 15 minutes. Get medical attention.
SKIN CONTACT	: Wash immediately with plenty of water or shower with soap. If irritation occurs, get medical attention.
INGESTION	: Immediately give plenty of water. Get medical attention.
INHALATION	: Remove to fresh air in case of accidental inhalation of vapors or dusts. Get medical attention.
NOTE TO PHYSICIANS : Treat Symptomatically. Treatment may vary with condition of victim and specifics of incident.	
<b>5. FIRE FIGHTING MEASURES</b>	
<u>EXTINGUISHING MEDIA</u>	: Suitable for water, foam, carbon dioxide or dry chemicals.
<u>FIRE FIGHTING EQUIPMENT</u>	: Wear full bunker gear including a positive pressure self contained breathing apparatus in any closed space.
<b>6. ACCIDENTAL RELEASE MEASURES</b>	
PERSONAL PRECAUTION	: Use personal protective equipments. Avoid dust formation.
ENVIRONMENTAL PRECAUTIONS	: Do not flush into surface water or sanitary sewer system.
METHODS FOR CLEANING UP	: Clean contaminated surface thoroughly.
<b>7. HANDLING AND STORAGE</b>	
HANDLING	: Avoid contact with eyes and skin, and avoid breathing dust or vapors. Provide appropriate exhaust ventilation at places where dust is formed.
STORAGE	: Keep containers tightly closed in a cool, well-ventilated space. Keep dry and cool below 5°C for quality.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION		
EXPOSURE LIMITS :		
COMPONENTS	EXPOSURE GUIDELINES (mg/m <sup>3</sup> )	
	ACGIH (TLV-TWA)	OSHA (PEL)
Silica Fused	0.1 (Respirable)	80
Epoxy Resin A	Not listed	Not listed
Epoxy Resin B	Not listed	Not listed
Phenol Resin A	Not listed	Not listed
Phenol Resin B	Not listed	Not listed
Metal Hydroxide	Not listed	Not listed
Carbon Black	3.5	3.5
<b>ENGINEERING MEASURES :</b> Ensure adequate ventilation, especially in confined areas.		
<b>PERSONAL PROTECTIVE EQUIPMENTS :</b> Respiratory protection - For most conditions, no respiratory protection should be needed ; however, in dusty atmospheres or insufficient ventilation, wear a suitable respiratory equipment or NIOSH // OSHA approved respirator to protect from dust. Hand protection - Impervious gloves (chemical-resistant gloves). Eye protection - Safety glasses with side shields. Skin and body protection - Chemical-resistant apron.		
9. PHYSICAL AND CHEMICAL PROPERTIES		
APPEARANCE	: Black tablet with slight antiseptic odor.	
pH	: Not applicable	
BOILING POINT	: Not applicable	
DECOMPOSITION TEMPERATURE	: (Softening point) 75°C - 95°C	
FLASH POINT	: None	
AUTOIGNITION TEMPERATURE	: No information available.	
EXPLOSION PROPERTIES	: No information available.	
VAPOR PRESSURE	: Not applicable	
VAPOR DENSITY (AIR=1)	: Not applicable	
SPECIFIC GRAVITY	: 1.8 - 2.2	
SOLUBILITY IN WATER	: Insoluble in water	
10. STABILITY AND REACTIVITY		
<b>CHEMICAL STABILITY :</b> Stable under recommended storage condition.		
<b>CONDITIONS TO AVOID :</b> Keep away from heat, moisture and sunlight for quality.		
<b>MATERIALS TO AVOID :</b> Oxidizing agents, acids and alkali.		
<b>HAZARDOUS DECOMPOSITION PRODUCTS :</b> Carbon dioxide. Thermal decomposition can lead to release of irritating gases and vapors such as methane, ammonia, Phenol, carbon monoxide and hydrocarbon compounds.		

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<b>11. TOXICOLOGICAL INFORMATION</b>	
ACUTE TOXICITY	: Silica fused: orl-rat LD50 : 3,160 mg/kg Epoxy resin A: orl-rat LD50 : 11 g/kg Epoxy resin B: orl-rat LD50 : >5,000 mg/kg
LOCAL EFFECTS	: No information available.
SENSITIZATION	: No information available.
CHRONIC TOXICITY	: Potential carcinogen by IARC; Silica fused : Group 3 Carbon Black : Group 2B
<b>12. ECOLOGICAL INFORMATION</b>	
MOBILITY	: No data is available on product itself.
ECOTOXICITY	: Waste water from subsequent processing should be given appropriate treatment in line with local regulations.
<b>13. DISPOSAL INFORMATION</b>	
WASTE FROM RESIDUES :	Can burn in a chemical incinerator equipped with an afterburner and scrubber in compliance with government or local disposal regulations, also contaminated packaging do so.
<b>14. TRANSPORT INFORMATION</b>	
Not a hazardous material for DOT (Department of transportation) shipping. Not dangerous by any mode of international transport. UN No.: None assigned.	
<b>15. REGULATORY INFORMATION</b>	
TSCA (TOXIC SUBSTANCES CONTROL ACT) : This product can be use solely for research and development because Phenol Resin B which is an ingredient of this product is not registered on the 8(b) inventory list.	
EINECS (EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES) : This product complies with the provisions of the European Inventory.	
EINECS No.	Silica Fused            262-373-8 Epoxy Resin B        Monomers are all on the inventory list. Phenol Resin A       Monomers are all on the inventory list. Phenol Resin B       Monomers are all on the inventory list. Metal Hydroxide      244-492-7 Carbon Black         215-609-9
NLP No.	Epoxy Resin A        500-033-5
Labeling according to EC Directives: No symbol and risk phrase are required.	

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### 16. OTHER INFORMATION

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DATA PREPARED BY :