

MATERIAL SAFETY DATA SHEET

Page 1/2

DIC Corporation

Engineering Plastics Div.

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Telephone number for information

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MATERIAL IDENTIFICATION

PRODUCT NAME **DIC-PPS Z-650-S1 BLACK**

CHEMICAL NAME Mixture of Poly Phenylene Sulfide (PPS), mineral filler, glass fiber, modifiers and small amount of additives.

CAS REGISTRY NUMBER

| | | | |
|----------------------------|---|------------|----------------------------------------------------------------------|
| Polyphenylenesulfide (PPS) | : | 25212-74-2 | 40 ~ 50wt.%. 15 ~ 25wt.%. 25 ~ 35wt.%. 1 ~ 10wt% MAX3wt% |
| Calcium carbonate | : | 471-34-1 | |
| Glass fiber | : | 65997-17-3 | |
| Modifiers(Non-Hazardous) | : | registered | |
| Additives | : | registered | |

TSCA INVENTORY CLASS All reportable ingredients are listed in the TSCA Chemical Substance Inventory.

DOT HAZARD CLASS Not regulated.

SHIPPING NAME Not applicable.

PREPARER Technical department of Engineering Plastics Div.

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PHYSICAL/CHEMICAL DATA

| | |
|---------------------|-------------|
| APPEARANCE | Granules. |
| COLOUR | Black |
| ODOR | None. |
| MELTING POINT | 275-285 |
| SOLUBILITY IN WATER | Insoluble. |
| VOLATILE CONTENT | None known. |
| SPECIFIC GRAVITY | 1.7 |

FIRE AND EXPLOSION HAZARD DATA

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|-----------------------------------|---------------------------------------------------------------------------------------------------------------|
| FLASH IGNITION TEMPERATURE | Over 500 , METHOD ASTM D1929. |
| FLAMMABILITY CLASSIFICATION | V-0, METHOD UL-94. |
| UNUSUAL FIRE, EXPLOSION HAZARDS | During a fire, irritating, toxic gases and aerosols may be generated by thermal decomposition and combustion. |
| SPECIAL FIRE FIGHTING INSTRUCTION | Fire fighters should wear self-contained breathing apparatus to avoid inhalation of smoke or vapors. |
| EXTINGUISHING MEDIA | Water, Carbon dioxide, Foam, Dry chemical and Sand. |

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HAZARDOUS REACTIVITY

| | |
|----------------------------------|-------------------------------------------------------------------------|
| STABILITY AT ROOM TEMPERATURE | Stable. |
| MATERIALS TO AVOID | Not established. |
| CONDITIONS TO AVOID | Heating above 320 for prolonged periods |
| HAZARDOUS DECOMPOSITION PRODUCTS | Thermal decomposition products include CO, SO ₂ and COS gas. |
| POLYMERIZATION | Will not occur. |

HEALTH HAZARD DATA

Read section 6; PROCESSING and final section; PRECAUTIONS FOR MOLDING, in brochure "PROPERTIES OF DIC.PPS", before using DIC.PPS. Face mask and protective clothes recommended for abnormal processing problems.

ACUTE OR IMMEDIATE EFFECTS: ROUTES OF ENTRY AND SYMPTOMS.

| | |
|------------|----------------------------------------------------------------------------------------------------------------------------------|
| INGESTION | Not a probable route of exposure. |
| SKIN | Molten polymer causes thermal burns. |
| EYE | Dust may cause a slight irritation and fumes from molten resin may be irritating to eyes. |
| INHALATION | Dust may causes a slight irritation and fumes from molten resin may causes irritating to throat, headache, dizziness and nausea. |

EMERGENCY FIRST AID

If exposed to fumes from molten resin, move to fresh air. Consult a physician if symptoms persist.
Wash skin with soap and plenty of water.
Flush eyes with water. Consult a physician if symptoms persist.
If molten resin contacts skin, cool rapidly with cold water. Do not attempt to peel resin from skin. Obtain medical attention for thermal burn.

| | |
|-------------------------------------------|-------------|
| CHRONIC EFFECTS | None known. |
| MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE | None known. |

PROTECTION INFORMATION

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|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EYE | Safety glasses are required. |
| SKIN | Protective gloves are required when handling hot polymer. Also long sleeve cotton shirt and long pants if handling molten resin. |
| VENTILATION | Thermal processing equipment should be ventilated to control fumes and dust. Local exhaust at processing equipment to keep particulate below 15 mg/m ³ (OSHA limit for nuisance dusts). |
| RESPIRATOR | None under normal processing if ventilation is adequate. |
| WORK/HYGIENIC PRACTICES | Wash hands before eating, drinking, smoking or using toilet. |

DISPOSAL

| | |
|------------------------|---------------------------------------------------------------------------------------------------|
| SPILL, LEAK OR RELEASE | Sweep up to prevent a slipping hazard. |
| WASTE DISPOSAL | Landfill or incineration in compliance with federal, state, and local regulations. |
| AQUATIC TOXICITY | Toxicity is expected to be low based on insolubility of polymer in water. |
| STORAGE CONDITIONS | Cool, dry place. Keep containers tightly closed to prevent moisture absorption and contamination. |

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