

MATERIAL SAFETY DATA SHEET

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DAINIPPON INK & CHEMICALS INC.

Engineering Plastics Div.

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MATERIAL IDENTIFICATION

PRODUCT NAME **DIC-PPS CZ-1030**

CHEMICAL NAME Mixture of Poly Phenylene Sulfide (PPS), carbon fiber and small amount of additives.

CAS REGISTRY NUMBER

Polyphenylenesulfide (PPS) : 25212-74-2 65~75wt.%

Carbon fiber : 7440-44-0 25~35wt.%

Additives : registered MAX2wt%

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.

Issued: September 26, 2003.

PHYSICAL/CHEMICAL DATA

APPEARANCE Granules.

COLOUR Black

ODOR None.

MELTING POINT 275-285 °C

SOLUBILITY IN WATER Insoluble.

VOLATILE CONTENT None known.

SPECIFIC GRAVITY 1.4 ~ 1.5

FIRE AND EXPLOSION HAZARD DATA

FLASH IGNITION TEMPERATURE Over 500°C, 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°C 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

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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