Material Safety Data Sheet

SECTION I

Product Name:
Panasonic Developer PA-705-9

Chemical Name & Synonyms:
Electrostatic Developer

Product Class:
Inkjet resinated black powder

Emergency Phone No.:
Matsushita Electric Industrial Co., Ltd.
Japan 0286-63-3221

Date: Jan. 8, 1988

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous Components:

<table>
<thead>
<tr>
<th>INGREDIENTS (CHEMICAL NAME)</th>
<th>CAS #</th>
<th>M</th>
<th>LISTED AS A HAZARDOUS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>OSHA</td>
</tr>
<tr>
<td>Carbon Black</td>
<td>1333-88-4</td>
<td>1-5</td>
<td>L</td>
</tr>
<tr>
<td>Magentaite</td>
<td>1306-88-1</td>
<td>65-70</td>
<td>L</td>
</tr>
<tr>
<td>Yttrium Oxide</td>
<td>1313-13-9</td>
<td>5.00%</td>
<td>L</td>
</tr>
<tr>
<td>Resin</td>
<td>25035-16-2</td>
<td></td>
<td>L</td>
</tr>
<tr>
<td>Resin</td>
<td>9003-07-0</td>
<td>10-30</td>
<td>L</td>
</tr>
<tr>
<td>Resin</td>
<td>35822-25-7</td>
<td></td>
<td>L</td>
</tr>
<tr>
<td>Additive</td>
<td>72685-85-3</td>
<td></td>
<td>L</td>
</tr>
<tr>
<td>Additive</td>
<td>7631-66-9</td>
<td></td>
<td>L</td>
</tr>
</tbody>
</table>

PEL of the Product: 50 mg/m³ (Total Dust), 5 mg/m³ (Respirable)

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: Not applicable
Specific Gravity (H₂O = 1): 2.5

Vapor Pressure (mm Hg): Not applicable

Vapor Density (Air = 1): Not applicable

Evaporation Rate (Butyl Acetate = 1): Not applicable

Solubility in Water: Insoluble

Appearance and Odor: Fine black powder, practically odourless

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): Not applicable
Flammable Limits: Not applicable

Extinguishing Media: Water, CO₂, Foam, Dry Chemical

Special Fire Fighting Procedures:
Not flammable or combustible but will burn if ignited. Extinguish with water. CO₂, form. dry chemical.

Unusual Fire and Explosion Hazards:
None under normal storage and use conditions.
SECTION V - REACTIVITY DATA

<table>
<thead>
<tr>
<th>Property</th>
<th>Condition to Avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability</td>
<td>Unknown</td>
</tr>
<tr>
<td>Condition to Avoid</td>
<td>Abnormally high temperature</td>
</tr>
<tr>
<td>Incompatibility/Chemicals to Avoid</td>
<td>None</td>
</tr>
<tr>
<td>Hazardous Decomposition or Polymerization</td>
<td>None in normal handling and use, none will occur</td>
</tr>
<tr>
<td>Condition to Avoid</td>
<td>Abnormally high temperature</td>
</tr>
</tbody>
</table>

SECTION VI - HEALTH HAZARD DATA

<table>
<thead>
<tr>
<th>Route(s) of Entry</th>
<th>Inhalation?</th>
<th>Skin?</th>
<th>Ingestion?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>√</td>
<td></td>
<td>√</td>
</tr>
</tbody>
</table>

Health Hazard (Acute and Chronic)

Health hazard is minimal being neither irritating, corrosive, volatile, nor toxic. Mutagenicity is negative.

Carcinogenicity:

NTP?: IAHC Monographs?: OSHA Regulated?

Not used carcinogens which are listed in NTP, IAHC and OSHA.

Signs and Symptoms of Exposure

Contact with eyes may result in mechanical irritation. Inhalation of dust may irritate mucous membranes. Ingestion may result in gastric disturbances.

Emergency and First Aid Procedures

HYSES—____—Immediately wash eyes with running water for 15 minutes. If irritation develops, get medical attention.

SKIN—____—Wash affected areas with soap and water. If irritation develops, get medical attention. Remove and launder contaminated clothing before reuse.

INGESTION—____—If swallowed dilute with water and immediately induce vomiting. Get medical attention if the victim is unconscious or having convulsion.

INHALATION—____—Remove to fresh air area. Aid in breathing if necessary and get medical attention.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Store in a cool, dry place.

Handling Procedure

Avoid dust inhalation and skin contact.

Other Precautions

Keep containers closed. Store in a cool, dry place.

SECTION VIII - CONTROL MEASURES

Respiratory Protection (Specify Type)

None required under normal use.

Ventilation

Local Exhaust: None required under normal use.

Mechanical (General): None required under normal use.

Protective Gloves: None required under normal use.

Other Preventive Equipment: None required under normal use.

Work/Hygienic Practices

Minimize breathing dust.