MINOLTA MATERIAL SAFETY DATA SHEET FEB 28 1998

MINOLTA CORPORATION
101 WILLIAMS DRIVE
RAMSEY, NJ 07446

EMERGENCY TEL. NO. CONTACT YOUR REGIONAL
POISON CONTROL CENTER

INFORMATION TEL. NO. 201-825-4000

SECTION 1 - PRODUCT IDENTIFICATION

PRODUCT: MT Toner
EQUIPMENT NO. RP502, RP503, RP504A
RP504M

SECTION 2 - PRODUCT AND COMPONENT HAZARD DATA

<table>
<thead>
<tr>
<th>INGREDIENT</th>
<th>CAS NO.</th>
<th>OSHA PEL-TWA</th>
<th>ACGIH TLV-TWA</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Styrene acrylate copolymer</td>
<td>9003-07-0</td>
<td>N.A.P.</td>
<td>N.A.P.</td>
<td>&gt;85</td>
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<tr>
<td>Polypropylene</td>
<td>1333-86-4</td>
<td>3.5mg/m³</td>
<td>3.5mg/m³</td>
<td>1- 5</td>
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<tr>
<td>Carbon black</td>
<td>7631-86-9</td>
<td>N.A.P.</td>
<td>N.A.P.</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Organic pigment</td>
<td>15mg/m³</td>
<td>10mg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amorphous silica</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As total nuisance dust
Toner, as a mixture, is considered a nuisance dust.

HMIS RATING: HEALTH: 0 FLAMMABILITY: 1 REACTIVITY: 1

SECTION 3 - EMERGENCY AND FIRST AID

INHALATION: Wash nostrils, rinse mouth.
INGESTION: Dilute stomach contents with several glasses of water.
EYES: Flush with water for 15 minutes.
SKIN: Wash with soap and water.

PRIMARY ROUTE OF ENTRY: Inhalation

SYMPTOMS OF OVEREXPOSURE
ACUTE: Minimal respiratory tract irritation may occur as with exposure to large amounts of any nontoxic dust. May cause cough and raise phlegm.
CHRONIC: None.
SECTION 4 - TOXICOLOGY AND HEALTH INFORMATION

HEALTH HAZARDS: Toner presents a low hazard for usual occupational settings. Based on available data, human exposure to toner has been shown to cause minimal respiratory tract irritation as may occur with large amounts of any non-toxic dusts. The results of one animal study where rats inhaled toner that was ten times more respirable than commercially available toner were observed to have no lung changes at low exposures (the most relevant level to potential human exposures). At higher levels a slight degree of lung fibrosis was observed due to excessive amounts of dust retained in the lungs for a prolonged interval.

ORAL LD_{50} : N.AV.
DERMAL LD_{50} : N.AV.
INHALATION LC_{50} >4.59mg/l (Rats) for 4-hours (This was the highest attainable concentration. There were no deaths during the study.)
EYE IRRITANT : N.AV.
SKIN IRRITANT : Not an irritant. (Rabbits)
SKIN SENSITIZER: N.AV.
MUTAGENICITY: No mutagenicity detected in Ames Assay.
CARCINOGENICITY: NTP: Not listed IARC MONOGRAPHS: Not listed OSHA REGULATED: Not listed

SECTION 5 - PHYSICAL DATA

APPEARANCE AND ODOR : Black powder, faint odor
BOILING POINT (°C) : N.AP. SPECIFIC GRAVITY (H₂O=1): 1.2
VAPOR PRESSURE (mmHg): N.AP. EVAPORATION RATE : N.AP.
VAPOR DENSITY (AIR=1): N.AP. MELTING POINT (°C) : N.AV.
SOLUBILITY IN WATER : Negligible pH : N.AP.

SECTION 6 - FIRE AND EXPLOSION DATA

FLASH POINT & METHOD: N.AP.
FLAMMABLE LIMITS IN AIR: LEL: N.AP. % UEL: N.AP. %
EXTINGUISHING MEDIA: Water, foam, dry chemical
SPECIAL FIREFIGHTING PROCEDURES: Avoid inhalation of smoke.

FIRE AND EXPLOSION HAZARDS: If dispersed in air, Toner, like most finely divided organic powders, may form an explosive mixture.

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SECTION 7 - REACTIVITY DATA

STABILITY: UNSTABLE: STABLE: ✓ CONDITIONS TO AVOID: None

INCOMPATIBILITIES: None

HAZARDOUS DECOMPOSITION BYPRODUCTS: Products of combustion are toxic. Avoid breathing of smoke.

HAZARDOUS POLYMERIZATION: MAY OCCUR: WILL NOT OCCUR: ✓ CONDITIONS TO AVOID: None

SECTION 8 - PERSONAL PROTECTION AND CONTROLS

VENTILATION: LOCAL EXHAUST: N.A.P. MECHANICAL (GENERAL): N.A.P.

RESPIRATORY PROTECTION: None required when used as intended in Minolta equipment.

PROTECTIVE GLOVES: None required when used as intended in Minolta equipment.

EYE PROTECTION: None required when used as intended in Minolta equipment.

WORK PRACTICES: None.

SECTION 9 - SAFE HANDLING AND USE PRECAUTIONS

HANDLING AND STORAGE: None

SECTION 10 - SPILL, LEAK, AND DISPOSAL PROCEDURES

FOR SPILLS AND LEAKAGE: If spilled, sweep up or vacuum.

WASTE DISPOSAL METHOD: Waste may be disposed or incinerated under conditions which meet all federal, state and local environmental regulations.

SECTION 11 - TRANSPORTATION


N.A.P.: Not applicable
N.A.V.: Not available

-- Office of Environmental Compliance --
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