MATERIAL SAFETY DATA SHEET

SECTION I

MANUFACTURER'S NAME: RISO KAGAKU CORPORATION
EMERGENCY TELEPHONE NUMBER: 508-777-7377
TELEPHONE NUMBER FOR INFORMATION: 508-777-7377 RISO, Inc., Danvers, MA

ADDRESS: 2-20-15 SHINBASHI, MINATO-KU, TOKYO, 105, JAPAN

DATE PREPARED: Dec. 21, 1991
SIGNATURE OF PREPARER:

TRADE NAME AND SYNONYMS: RISOGRAF INK (RC)
CHEMICAL NAME AND SYNONYMS: Water/Oil Type Emulsion Ink for Duplicator

SECTION II - Hazardous Ingredients/Identity Information

RISO KAGAKU CORPORATION considers the formulation of this RC Ink a Trade Secret. Release of the formulation will be made under a non-disclosure agreement.
All Hazardous and carcinogenic materials, contained in the RC Ink, as defined by OSHA regulations are described below.

Hazardous Components

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>Hazard Classification, OSHA (PEL, ACGIH (TWA))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral Oil (Ink Oil)</td>
<td>64742-55-8, 64742-56-9</td>
<td>Carcinogenic (AARC) 10%</td>
</tr>
<tr>
<td>Motor Oil</td>
<td>64742-18-3, 64742-44-5</td>
<td>Carcinogenic (AARC) 3%</td>
</tr>
<tr>
<td>Polyethylene Glycol (PEG)</td>
<td>25322-68-6</td>
<td>Compressible Fluid 4%</td>
</tr>
<tr>
<td>Carbon Black (in Oil of Ink)</td>
<td>1333-86-4</td>
<td>PEL 15 mg/m³, TWA 10 mg/m³ (as total dust)</td>
</tr>
</tbody>
</table>

* refer to NOC MSDS (Attached)
• refer to NOC MSDS (Attached)
☆ refer to EXXON MSDS on EXOSOL D80 (Attached)
+ The Glycerol is in a water-phase of emulsion and does not disperse in the air.
O The Carbon Black is in a paste form and does not disperse in the air.

SECTION III - Physical/Chemical Characteristics

Boiling Point: Not Applicable
Specific Gravity (H₂O = 1):
Specific Gravity (H₂O = 1): 1.00 - 1.02
Note: The lowest boiling point is water. (212°F/ 100°C)
Vapor Pressure (mm Hg): Not determined
Melting Point: Not Applicable
Vapor Density (AIR = 1): Not Applicable
Evaporation Date: (Butyl Acetate = 1) Not Applicable

Solubility in Water: Negligible

Appearance and Odor: Colored extremely viscous liquid with slight odor.
SECTION IV - Fire and Explosion Hazard Data

Flash Point: Not established (JIS K2265 Cleveland Tester)  Flammable Limits: None  UEL: Not Applicable  UEL: Not Applicable

Extinguishing Media: CO₂, Dry chemical foam, Water fog or spray.

Special Fire Fighting Procedures:
Ink will not act as a source of ignition, but might disperse in a fire.

Unusual Fire and Explosion Hazards: None.

SECTION V - Reactive Data

Stability: Unstable  Stable X

Conditions to Avoid:

Incompatibility (Materials to Avoid): Strong oxidizing agents.

Hazardous Decomposition or Byproducts: CO on incomplete combustion.

Hazardous Polymerization: May Occur  Will Not Occur X

Conditions to Avoid:

SECTION VI - Health Hazard Data

Route(s) of Entry: Inhalation? Yes  Skin? Yes  Ingestion? Yes

Health Hazards (Acute and Chronic): EXXSOL D80 Mineral oil contained in ink.

Refer to Attached MSDS

Mutagenicity: MTP? No  IARC Monographs? Yes  OSHA Regulated? No

Mineral oil (Ink Oil and Motor Oil) is listed in IARC Monographs SUPPLEMENT 7 (1987).

Mineral oil (aliphatic hydrocarbon) EXXSOL D80

Signs and Symptoms of Exposure: Refer to Attached NOC MSDS and EXXSOL MSDS

Medical Conditions Generally Aggravated by Exposure: Refer to Attached MSDS

Emergency and First Aid Procedures: Refer to Attached MSDS

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SECTION VII - Precautions for Safe Handling and Storing

Steps to be taken in case material is released or spilled:
Spills should be wiped up with cloth or paper.

Waste Disposal Method:
Material of ink bottle is Polypropylene (PP). Dispose in accordance with State or Local law.
Controlled burning (small quantities).
Contact local industrial waste disposal company for disposal (large quantities).

Precautions to be taken in handling and storing:
None. Store ink under the bottled condition.
Recommended storage temperature: 41-85°F (5-30°C)

Other Precautions: None

SECTION VIII - Control Measures

Respiratory Protection (Specify Type):
Not necessary

Ventilation
Local Exhaust: Desirable Special: None
Mechanical (General): Desirable Other: None

Protective Gloves: Not normally required.
Eye Protection: Not normally required.

Other Protective Clothing or Equipment: Not normally required.

Work/Hygienic Practices: None