



# MATERIAL SAFETY DATA SHEET

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 DATE PREPARED: 06/25/2007  
 MSDS No.: GRI001WU-00

## Section 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : RISOGRAPH GR INK BLACK  
 ITEM CODE: S-3878  
 MANUFACTURER  
 NAME: RISO KAGAKU CORPORATION  
 ADDRESS: 5-34-7 SHIBA, MINATO-KU, TOKYO, 108-8385, JAPAN  
 TELEPHONE NUMBER: 81 (3) 5441-6611  
 DISTRIBUTOR  
 NAME: RISO, INC.  
 ADDRESS: 300 ROSEWOOD DRIVE SUITE 210, DANVERS, MA 01923 U.S.A.  
 TELEPHONE NUMBER: (978) 777-7377

## Section 2 - COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE / MIXTURE: Mixture (Preparation)  
 CHEMICAL NATURE: Water-in-Oil-type emulsion

### COMPONENTS:

|                        | CAS No.      | wt%          |
|------------------------|--------------|--------------|
| Petroleum solvent      | 64742-55-8   | < 15         |
|                        | 64742-52-5   |              |
| Glycerol               | 56-81-5      | < 10         |
| Carbon black (pigment) | 1333-86-4    | < 10         |
| Alkyd resin            | Trade secret | Trade secret |
| Water                  | 7732-18-5    | Trade secret |

## Section 3 - HAZARDS IDENTIFICATION

### POTENTIAL HEALTH EFFECTS:

EYE: May cause slight irritation.  
 SKIN: May cause slight irritation.  
 INHALATION: Vapour or mist in unusually high concentrations generated from heating this ink, or as from exposure in poorly ventilated areas, may cause irritation of the nose and throat, headache, and nausea.  
 INGESTION: May cause abdominal discomfort, nausea.

## Section 4 - FIRST-AID MEASURES

EYE: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
 SKIN: After contact with skin, wash immediately with plenty of water using a mild soap.  
 INHALATION: If you feel unwell, move from the contamination immediately to fresh air and seek medical advice.  
 INGESTION: If swallowed, do not induce vomiting and seek medical advice.



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## Section 5 - FIRE-FIGHTING MEASURES

FLASH POINT: None (Closed Cup)  
 AUTOIGNITION TEMPERATURE: > 400 °C  
 EXPLOSION PROPERTIES: Not applicable  
 EXTINGUISHING MEDIA: Water, CO<sub>2</sub>, foam, dry chemical powder, dry sand  
 SPECIFIC HAZARDS WITH REGARD TO FIRE-FIGHTING MEASURES:  
 This ink does not act as a source of ignition, but might burn if involved in a fire.  
 HAZARDOUS COMBUSTION PRODUCTS: CO, CO<sub>2</sub>, smoke

## Section 6 - ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Ventilate the area until material is completely picked up.  
 ENVIRONMENTAL PRECAUTIONS: Do not empty into the drains.  
 METHOD OF CLEANING UP: Shovel up, then wipe up with cloth or paper.

## Section 7 - HANDLING AND STORAGE

HANDLING:  
 TECHNICAL MEASURES: Use only in the well-ventilated areas.  
 SAFE HANDLING ADVICE: Avoid contact with skin. Use only with cartridge (bottle).  
 STORAGE:  
 STORAGE CONDITIONS: Store at 5 - 35 °C and protect from sunlight.  
 PACKAGING MATERIAL: Only original cartridge (bottle).

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING MEASURES: Good general ventilation should be sufficient for most conditions.

EXPOSURE GUIDELINES:

|                        | ACGIH TLV              | OSHA PEL               |
|------------------------|------------------------|------------------------|
| Petroleum solvent      | 5 mg/m <sup>3</sup> *1 | 5 mg/m <sup>3</sup> *1 |
| Glycerol               | 10 mg/m <sup>3</sup>   | 15 mg/m <sup>3</sup>   |
| Carbon black (pigment) | 3.5 mg/m <sup>3</sup>  | 3.5 mg/m <sup>3</sup>  |

\*1 : as mineral oil mists

PERSONAL PROTECTIVE EQUIPMENT:

RESPIRATORY PROTECTION : Not normally required  
 HAND PROTECTION: Recommend the use of gloves in case of contact with skin.  
 EYE PROTECTION: Not normally required  
 SKIN AND BODY PROTECTION : Not normally required



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## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

|                       |                       |
|-----------------------|-----------------------|
| PHYSICAL STATE:       | Paste                 |
| ODOR:                 | Slight petroleum odor |
| PH:                   | Not applicable        |
| BOILING POINT:        | > 100 °C              |
| MELTING POINT:        | < 0 °C                |
| OXIDISING PROPERTIES: | Not applicable        |
| DENSITY:              | 1.00 - 1.12           |
| WATER SOLUBILITY:     | Negligible            |

## Section 10 - STABILITY AND REACTIVITY

|                                   |  |
|-----------------------------------|--|
| STABILITY:                        | This product is considered a stable material under normal storage and handling conditions. |
| CONDITION TO AVOID:               | Avoid exposure to high temperatures.   |
| MATERIALS TO AVOID:               | Strong oxidising agents  |
| HAZARDOUS DECOMPOSITION PRODUCTS: | None   |

## Section 11 - TOXICOLOGICAL INFORMATION

|                        |  |
|------------------------|--|
| ACUTE ORAL TOXICITY:   | LD50 >= 2500mg/kg (rat)  |
| ACUTE EYE IRRITATION:  | May cause slight irritation.   |
| ACUTE SKIN IRRITATION: | May cause slight irritation.   |
| MUTAGENICITY:          | Negative in the Ames test  |
| CARCINOGENICITY:       | Carbon black is listed as Class 2B (Possible human carcinogen) by IARC. (However, IARC Monograph 65 also indicates "exposures to carbon black in the use of printing ink, rubber or paint are negligible.")<br>None of the other ingredients in this product are listed by IARC, NTP, MAK, OSHA or ACGIH as a carcinogen. None of the other ingredients have been classified as carcinogens according to EU, IARC, MAK, NTP or OSHA. |

*\*These information are based on toxicity data for similar materials and ingredients.*

## Section 12 - ECOLOGICAL INFORMATION

No data available

## Section 13 - DISPOSAL CONSIDERATIONS

|                     |  |
|---------------------|--|
| METHOD OF DISPOSAL: | Burn in an adequate incinerator or bury in landfill in accordance with all applicable regulations. Any disposal practice must be in compliance with local, state and federal laws and regulations.<br>Materials of ink-cartridge (bottle) are polypropylene (PP) and high-density polyethylene (HDPE). |
|---------------------|--|



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## Section 14 - TRANSPORT INFORMATION

|                |                |
|----------------|----------------|
| RID/ADR:       | Not applicable |
| ADNR:          | Not applicable |
| IMDG CODE:     | Not applicable |
| ICAO/IATA-DGR: | Not applicable |
| UN NUMBER:     | Not applicable |

## Section 15 - REGULATORY INFORMATION

OSHA Hazard Communication Standard, 29CFR 1910.1200 :

This product is not considered hazardous under this standard.

TSCA (Toxic Substance Control Act) :

All chemical substances in these products are listed in TSCA chemical substance inventory.

ACGIH (American Conference of Governmental Industrial Hygienists) :

This product contains no chemical substances classed carcinogenicity.

WHMIS (Workplace Hazardous Materials Information System)

This product is not considered a controlled product under this System.

## Section 16 - OTHER INFORMATION

NFPA RATING (U.S.A.):

Health = 0      Flammability = 1      Reactivity = 0

The information herein is given in good faith, but no warranty, express or implies, is made. Please consult RISO INC. for further information.