



# MATERIAL SAFETY DATA SHEET

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DATE PREPARED: 06/25/2007  
MSDS No.: CRI000U-03

## Section 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : RISOGRAPH CR INK <See separate section>  
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: <See separate section>

## 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.

## 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: <See separate section>  
 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

**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



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## 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.")  
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.  
Ink-pack consists of paper-carton, multiple plastic film and polypropylene cap.

## 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.



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## Section 1 – PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME (ITEM CODE): RISOGRAPH CR INK U BLACK (S-2488)

## Section 2 - COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENTS:

	CAS No.	wt%
Petroleum solvent	64742-55-8	< 10
	64742-47-8	Trade secret
Glycerol	56-81-5	< 10
Carbon black (pigment)	1333-86-4	< 10
Organic pigment(s)	Trade secret	Trade secret
Alkyd resin	Trade secret	Trade secret
Water	7732-18-5	Trade secret

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:

	CAS No.	ACGIH TLV	OSHA PEL
Petroleum solvent	64742-55-8	5 mg/m <sup>3</sup> *1	5 mg/m <sup>3</sup> *1
Glycerol	56-81-5	10 mg/m <sup>3</sup>	15 mg/m <sup>3</sup>
Carbon black (pigment)	1333-86-4	3.5 mg/m <sup>3</sup>	3.5 mg/m <sup>3</sup>

\*1 : as mineral oil mists



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## Section 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAMES (ITEM CODE): RISOGRAPH CR INK BROWN (S-2492)

## Section 2 – COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENTS:

	CAS No.	wt%
Petroleum solvent	64742-46-7	< 5
	64742-47-8	Trade secret
Soybean oil	8001-22-7	< 6
Glycerol	56-81-5	< 10
Carbon black (pigment)	1333-86-4	< 1
Organic pigment(s)	Trade secret	Trade secret
Alkyd resin	Trade secret	Trade secret
Water	7732-18-5	Trade secret

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDLINES:

	CAS No.	ACGIH TLV	OSHA PEL
Petroleum solvent	64742-46-7	5 mg/m <sup>3</sup> *1	5 mg/m <sup>3</sup> *1
Glycerol	56-81-5	10 mg/m <sup>3</sup>	15 mg/m <sup>3</sup>
Carbon black (pigment)	1333-86-4	3.5 mg/m <sup>3</sup>	3.5 mg/m <sup>3</sup>

\*1 : as mineral oil mists



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## Section 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAMES (ITEM CODE): RISOGRAPH CR INK RED (S-2489)  
RISOGRAPH CR INK BLUE (S-2490)  
RISOGRAPH CR INK GREEN (S-2491)  
RISOGRAPH CR INK YELLOW (S-2493)  
RISOGRAPH CR INK BRIGHT RED (S-2494)

## Section 2 - COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENTS:

	CAS No.	wt%
Petroleum solvent	64742-46-7	< 5
	64742-47-8	Trade secret
Soybean oil	8001-22-7	< 6
Glycerol	56-81-5	< 10
Organic pigment(s)	Trade secret	Trade secret
Alkyd resin	Trade secret	Trade secret
Water	7732-18-5	Trade secret

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDLINES:

	CAS No.	ACGIH TLV	OSHA PEL
Petroleum solvent	64742-46-7	5 mg/m <sup>3</sup> *1	5 mg/m <sup>3</sup> *1
Glycerol	56-81-5	10 mg/m <sup>3</sup>	15 mg/m <sup>3</sup>

\*1 : as mineral oil mists