

MATERIAL SAFETY DATA SHEET

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DATE PREPARED:08/18/2008
MSDS No.: HCRI001U-00

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: RISO HC INK R BLACK

ITEM CODE: S-4867

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)

COMPONENTS:

	CAS No.	Wt%
Petroleum solvent	64742-46-7	< 45
Carbon black	1333-86-4	< 10
Fatty acid ester	Trade secret	Trade secret
High alcohol	Trade secret	Trade secret
Polymeric amide	Trade secret	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 and seek medical advice.

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

> 100 °C (Cleveland Open-cup) FLASH POINT:

> 200 °C **AUTOIGNITION TEMPERATURE:**

EXPLOSION PROPERTIES: Not applicable

EXTINGUISHING MEDIA: CO₂, dry chemical powder, foam, dry sand

SPECIFIC HAZARDS WITH REGARD TO FIRE-FIGHTING MEASURES:

No classed as flammable.

Combustion will evolve toxic and irritating vapours.

HAZARDOUS COMBUSTION PRODUCTS:

CO, CO₂, 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:

Use only in the well-ventilated areas. TECHNICAL MEASURES:

Avoid contact with skin. Use only with cartridge. SAFE HANDLING ADVICE:

STORAGE:

Store at 5 - 35 °C and protect from sunlight. STORAGE CONDITIONS:

Keep the ink out of reach of children.

PACKAGING MATERIAL: Only original cartridge.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

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

EXPOSURE GUIDELINES:

	ACGIH TLV	OSHA PEL
Petroleum solvent	5 mg/m ³ *1	5 mg/m ³ *1
Carbon black	3.5 mg/m ³	3.5 mg/m ³

*1: as mineral oil mists

PERSONAL PROTECTIVE EQUIPMENT:

RESPIRATORY PROTECTION: Not normally required

Recommend the use of gloves in case of contact with skin. HAND PROTECTION:

EYE PROTECTION: Not normally required SKIN AND BODY PROTECTION: Not normally required

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Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Black liquid

ODOR: Slight petroleum odor

PH: Not applicable BOILING POINT: $> 200 \, ^{\circ}\text{C}$ MELTING POINT: $< 0 \, ^{\circ}\text{C}$

OXIDISING PROPERTIES: Not applicable

DENSITY: 0.86
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.")

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.

Section 12 - ECOLOGICAL INFORMATION

ECOTOXICITY:

FISH TOXICITY: Oryzias latipes LL50-96h > 100mg/l

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.

Section 14 - TRANSPORT INFORMATION

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

^{*}These information are based on toxicity data for similar materials and ingredients.

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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.