MATERIAL SAFETY DATA SHEET

DATE PREPARED:12/14/2006
MSDS No.: RZI001U-02

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : RISO INK Ztype BLACK / U

ITEM CODE: S-4254

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%
Soybean oil	8001-22-7	> 6
Petroleum solvent	64742-53-6 64742-55-8	< 10
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 irritating.

SKIN: May cause slight irritating.

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 ^{o}C

EXPLOSION PROPERTIES: Not applicable

EXTINGUISHING MEDIA: Water, CO_2, 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_2, 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 ^{o}C and protect from sunlight.

Keep the ink out of reach of children.

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
Soybean oil	Not listed	Not listed
Petroleum solvent	5 mg/m^3 *1	5 mg/m^3 *1
Glycerol	10 mg/m^3	15 mg/m^3
Carbon black (pigment)	3.5 mg/m^3	3.5 mg/m^3
Alkyd resin	Not listed	Not listed
Water	Not listed	Not listed

*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 ^{o}C
MELTING POINT:	< 0 ^{o}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 irritating.*
ACUTE SKIN IRRITATION:	May cause slight irritating.*
MUTAGENICITY:	No data available
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 Cartridge(bottle) material is plastic(polypropylene/polyethylene). Label material is plastic(metal included).

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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.

NTP (National Toxicology Program).

This product contains no chemical substances classed carcinogenicity.

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.