MATERIAL SAFETY DATA SHEET

MSDS: 2006082010US
Date Prepared: September 6,2007
Date Revised :

1.CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Acid Dye Ink Red

Company Name:
Konica Minolta IJ Technologies, Inc.
Sakura-machi 1, Hino-shi, Tokyo 191-8511 Japan

Telephone Number:
TEL: +81-42-589-3708
FAX: +81-42-589-3868

2.COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS	CAS#	wt.%
Water	7732-18-5	40 - 55
Ethylene glycol	107-21-1	15 - 25
Glycerin	56-81-5	5 - 15
Propylene glycol	57-55-6	1 - 10
Triethylene glycol monobutyl ether	143-22-6	1 - 10
Dye	Company confidential	1 - 10

3.HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Colored liquid. Slight characteristic odor.
May be harmful if swallowed.

POTENTIAL HEALTH EFFECTS

Eye Effects : May cause eye and mucous membrane irritation.
Skin Effects : May cause slight skin irritation.
Ingestion Effects : May be harmful if swallowed.
Inhalation Effects: No identified health effects.
Chronic Effects/ Carcinogenicity:
None of the components in this material is listed by IARC, NTP or ACGIH as a carcinogen.

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4.FIRST AID MEASURES

Eye : Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

Skin : Wash with water and mild soap for 15 minutes. If symptoms occur, get medical attention.

Ingestion : Wash out mouth with water. Drink one or two glasses of water. Get medical attention immediately. ONLY induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

Inhalation: No exposure expected under normal conditions. Large amount of vapor or mist if inhaled, move victim to fresh air immediately. If symptoms occur, get medical attention.

5.FIRE FIGHTING MEASURES

Flash Point : None
Method Used : Not applicable
Flammable Limits : Not applicable
Autoignition Temperature : Not applicable
Flammability Classification: Not applicable

Unusual Fire and Explosion Hazard: May be flammable when the moisture of the solution evaporates at high temperature.

Extinguishing Media: Water spray, dry chemical, carbon dioxide, alcohol-resistant foam.

Fire Fighting: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Apply cooling water to sides of containers that are exposed to flames. Combat fire out of sheltered position.

Hazardous Combustion Products: Carbon monoxide, carbon dioxide, nitrogen oxides, sulfur oxides and chlorine, hydrogen chloride.

6.ACCIDENTAL RELEASE MEASURES

Spill and Leakage Procedures:

Wear personal protective equipment(See Section 8). Ventilate closed spaces before entering. Absorb spill with inert material(e.g. dry sand or earth), then place in a chemical waste container.

7.HANDLING AND STORAGE

Handling:

Avoid contact with eyes, skin and clothing. Wear personal protective equipment (See Section 8). Use with adequate ventilation. Wash thoroughly after handling.

Prevention of Fire and Explosion:

No special precautionary measures should be required under normal use conditions.

Storage:

Keep container tightly closed. Store in a cool and dry place. Keep away from incompatible substances(See Section 10).

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8.EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Standards:

INGREDIENTS	ACGIH TLV TWA	ACGIH TLV STEL	OSHA PEL
Ethylene glycol	None established	C 100mg/m3	None established
Glycerin	10 mg/m3		15mg/m3(Total dust)
Propylene glycol	None established		None established
Triethylene glycol monobutyl ether	None established		None established
Dye	None established		None established

Engineering Controls: Use process enclosures or local exhaust ventilation.
Respiratory Protection: Not required under normal conditions.
Skin Protection: Impervious gloves should be worn.
Eye Protection: Splash goggles should be worn.

9.PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Colored liquid
Odor : Slight characteristic odor
pH : 7.0 - 8.0
Vapor Pressure : Not available.
Vapor Density : Not available.
Evaporation Rate: Not available.
Boiling Point : Not available.
Melting Point : Not applicable.
Solubility : Completely soluble in water.
Specific Gravity: 1.00 - 1.10

10.STABILITY AND REACTIVITY

Stability: Stable.
Incompatibility: Oxidizers.
Hazardous Decomposition Products:
Carbon monoxide, carbon dioxide, nitrogen oxides, sulfur oxides and chlorine, hydrogen chloride.
Hazardous Polymerization: Will not occur.

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11.TOXICOLOGICAL INFORMATION:

Product

No data for mixture.

Ingredients

Ethylene glycol

Acute oral toxicity	: LD50: 4700mg/kg[rat], LD50: 7500mg/kg[mouse]
Eye irritation	: Mild[rabbit]
Skin irritation	: Mild[rabbit]
Mutagenicity	: Ames test Negative, Chromosomal aberration test Negative

Glycerin

Acute oral toxicity	: LD50: 12600mg/kg[rat], LD50: 4090mg/kg[mouse]
Acute dermal toxicity	: LD50: >10gm/kg[rabbit]
Inhalation	: LC50: >570mg/m3/1h[rat]
Eye irritation	: Minimal[rabbit]
Skin irritation	: Mild[rabbit]
Mutagenicity	: Ames test Negative, Chromosomal aberration test Negative

Propylene glycol

Acute oral toxicity	: LD50: 20000mg/kg[rat], LD50: 22000mg/kg[mouse], LD50: 18500mg/kg[rat], LD50: 18350mg/kg[guinea pig]
Acute dermal toxicity	: LD50: 20800mg/kg[rabbit]
Eye irritation	: Minimal[rabbit]
Skin irritation	: Mild[rabbit]
Mutagenicity	: Ames test Negative, Chromosomal aberration test Negative, Micronucleus test Negative

Triethylene glycol monobutyl ether

Acute oral toxicity	: LD50: 5300mg/kg[rat], LD50: 6730mg/kg[rat]
Acute dermal toxicity	: LD50: 3540μL/kg[rabbit]
Eye irritation	: moderate[rabbit]
Mutagenicity	: Ames test Negative

12.ECOLOGICAL INFORMATION:

Ingredients

Ethylene glycol

Biodegradation	: Readily biodegradable
Fish acute toxicity	: 24hrLC50: >5000mg/l -modified ASTM D 1345[Goldfish]
Daphnia acute toxicity	: 48hrEC50: 10000mg/l[Daphnia magna]
Algae growth inhibition	: 1g/l No effect [Scenedesmus subspicatus]
Octanol/water partition coefficient	: -1.930

Glycerin

Biodegradation	: Readily biodegradable
Fish acute toxicity	: 24hrLC50:>5000mg/l[Goldfish]
Daphnia acute toxicity	: 24hrEC50:>10000mg/l[Daphnia magna]

Propylene glycol

Biodegradation	: Readily biodegradable
Fish acute toxicity	: 96hrLC50:>100mg/l[Oryzias latipes]
Daphnia acute toxicity	: 48hrEC50:>1000mg/l[Daphnia magna]
Algae growth inhibition	: 48hrEC50:>1000mg/l[Selenastrum capricornutum]
Octanol/water partition coefficient	: -1.400

Triethylene glycol monobutyl ether

Fish acute toxicity	: 96hrLC50:>100mg/l[Oryzias latipes]
Daphnia acute toxicity	: 48hrEC50:>860mg/l[Daphnia magna]
Algae growth inhibition	: 72hrEC50:>920mg/l[Selenastrum capricornutum]

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13.DISPOSAL CONSIDERATIONS:

When disposing of the waste or recovered material, consult federal, state and/or local regulations for the proper disposal method.

14.TRANSPORT INFORMATION:

DOT/TDG CLASS: Not regulated.

15.REGULATORY INFORMATION:

OSHA Hazard Communication Standard,29CFR 1910.1200:
This product is NOT considered hazardous under this standard.

CERCLA(Comprehensive Environmental Response Compensation and Liability Act):
None.

SARA Title III (Superfund Amendments and Reauthorization Act)
302 Extreme Hazardous Substance: None.
311/312 Hazard Categories: None.
313 Reportable Ingredients: Ethylene glycol

16.OTHER INFORMATION:

HMIS Hazard Rating Health:1, Flammability:1, Reactivity:0

The above information is believed to be accurate and represents the best information currently available to our company. However, our company make no warranty with respect to such information, and our company assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.