SAFETY DATA SHEET

DATE: 08-Feb-2010

REVISION: -

1. PRODUCT INFORMATION

Product Name: ZIG KURECOLOR INK 25ml

Product Number: #KCR-25
Recommend Application: Ink

Company Information: Company Name: KURETAKE CO., LTD.

Address: 576 Minamikyobate-cho, 7-chome, Nara-shi, 630-8670

Division: Technician of Lab.
Tel: +81. 742. 50. 2055
Emergency Tel: +81. 742. 50. 2055
Fax: +81. 742. 50. 2077
E-mail: kuretake@kuretake.co.jp

2. HAZARDS IDENTIFICATION

GHS Classification

Physical hazardous nature

Dengerous for health

Acute toxicity

Acute toxicity (Oral)

Acute toxicity (Endermatic)

Acute toxicity (Inhale : Gas)

No data

No data

Acute toxicity (Inhale : Dust, Mist)

Skin corrosion / irritative

Serious irritate the eyes

Out of division

No data

Division2A-2B

Sensitizing property of apparatus

respiratorius and skin No data

Skin sensitizing property

Senerate cell mutagenicity

Carcinogen

No data
Reproductive effect

No data
Single exposure

No data
Repetition exposure

No data

Hazardous Property for Acute hazardous aquatic environment No data
Environment Inveteracy hazardous aquatic environment No data

Factore Label



/ Systematic Toxicity

Specially Target Organ







Hazardous Information

No date

Instruction

[Measure for Safety]

Do not use this product until read all safety precaution and understand it. Before use, please get the operating instruction. Keep this product away from the ignition source such as fever, speak,

open flame and high temperature. - NO SMOKING

[First Aid]

If a fire occur, fight a fire in the proper way.

Inhale: Remove the victim to the fresh air area and keep him quiet.

Swallow: Do not vomit by force. See a doctor.

Eye: Clean by water in a few minutes. Put off the contacts if possible.

Skin: Clean by a large of water with soap.

Skin or Hair: Put off the polluted clothes immediately.

Exposure: See a doctor.

If the irritate to the eyes continue, see a doctoer. If feel bad, see a doctor.

[Strage]

Keep the container air-tight, store in the cool and well ventilated area and locked.

(Disposal)

For dispose the content and container, entrust to the special waste disposer authorized by the governor of prefectural and city governments.

Country / Community Information

3. COMPOSITION AND INGREDIENT INFORMATION

Single, Mixture: Mixture

Ingredient and content

Ingredient name	CAS No.	Concentration Wt.%		
Ethyl alcohol	64-17-5	51.3-64.0		
Isopropyl alcohol	67-63-0	2.9- 3.7		
n-Propyl alcohol	71-23-8	5.7- 7.2		
Propylene glycol mono methyl ether	107-98-2	16.8-20.3		
Dipropylene glycol mono methyl ether	34590-94-8	4.2- 5.1		

4. FIRST AID

For Inhale Remove the victim to the fresh air area. If feel bad, see a doctor.

For Skin Put off the all polluted clothes immediately. Clean with the proper temp, and slow flowing water

for over 15 minutes. If have irritate the skin, see a doctor. Call a doctore if feel bad. Before re-use

the put off clothes, clean it up and remove the pollution.

For Eyes Put off the contacts if possible, and continue to clean. Clean the eyes carefully for a few minutes.

If the eyes get this product, clean the eye immediately and wash away completely. If the cleaning

eyes not enough, it may cause irreversible eye damage.

If irritate to the eyes continue, see a doctor.

For Swallow Call a doctor, if feel bad. Rinse the mouth out. Do not have the victim vomit.

Expected acute symptom and late symptom: Sialorrhea, face flash, cough, dizzy, lethargy, headache, sore throat,

deliquim animi barf, vomition

Most important sign and syptom: Protect the person received first aid:

Rescuer must wear proper protective equipment according to the situation.

Special notandum for doctor: Symptom will appear later, so that if the patient exposed excessively, it needs medical follow progress.

5. FIRE-FIGHTING MEASURE

Extinguishing Media: In the initial stage of fire, use fire extinguishers or with large amount of water injection.

Hydrogen peroxide or perchloric acid or sodium peroxide or chlomium oxide or nitric acid

Forbidden Extinguishing Media: Cylindrical pouring water.

Special Dangerous and Harmful Effect: The irritative, toxicity and corrosive gas is generated by fire. The container will

be burst by heating. If it is not dangerous, move the container from the fire area.

If it is impossible to move, cool the container and around by spraying water. After extinguishing

a fire, cool the container completely by large quantity of water.

Protect the Person Extinguish a Fire: For fighting fire, wear compressed air open-circuit SBCA and protect equipment

for chemical. Fight a fire from up wind.

6. ACCIDENTAL RELEASE MEASURES

Notandum for Fuman Body, Protective Equipment and Emergency Measure:

The worker must wear proper protector (refer to section 8) not to get the paint on the skin or into eyes. Do not touch the leakage material or walk into it. Keep the proper distance in all direction as the leakage area immediately. No unauthorized entry. If leakage but not occur a fire, wear the occlusive and impervious protect wear. Stay in the wind. Move away from the law ground. Ventilate before enter the sealed area.

Notandum for Environment:

Prevent from influx into the drain ditch, liver, basement and closed area.

Take notice not to affect the environment by discharge the paint into the liver.

Collect Neutralization:

In small quantity case, absorb the leakage material by dry sand and nonflammable material or collect it in the sealed type container then dispose it. In small quantity case, collect the absorbed material by clean antistatic tools. In large quantity case, yard the leakage material by mound to prevent flow out and lead it into safety area then collect it. In large quantity case, water spray lower the steam temperature but it may not inhibit combustion at the sealed area.

Containment or Depurant and Equipment:

If it is not danger, stop the leakage. Ground all equipment which need for handle the leakage material. Use steam retard foam for lower the steam concentration.

Precaution of Second Disaster:

Clear away all ignition source immediately(Do not smoking near around, forbid firework and flame) In case large steam generating, retard it by mist spray. Call related agency and ask the help.

7. HANDLING AND STORAGE

Handling Do the equipment measure described on the section 8 and war protector.

Local exhaust ventilation, whole ventilation:

Do the local exhaust ventilation and whole ventilation described on section 8. Prevent leakage the liquid and steam as possible.

Safe handling notandum:

This product irritate the eyes so that care not to get it into the eyes. This product may cause sleep or vertigo, irritate the apparatus respiratorius and damage organ parts so that do not touch, inhale and swallow it. Do not fall, drop, shock or drag the container. Clean hands well after use this product. Use this product outside or well ventilated area only. Avoid touching, refer to the section 10 Keep away from high tempereture materials spark and fire, and avoid touching oxidizaer and

organic peroxide.

Storage Keep the container airtight and stock it in well ventilated place. Stock in the fulfilled and ventilated

and cool place. Keep away from oxidant. Keep away from direct sunlight and fire. The inventory location must be fire-proof construction and the floor must be impermeable to prevent permeate

the basement and spill to outside. Lock up the container.

Dangerous goods if mixed:

Refer to the section 10.

Container material:

Use the container regulated by fire law and UN transportation law.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Install the eyewashing devices and safety shower where handle or stock this product.

Protection Equipment

For apparatus respiratorius:

Wear proper respiratory protect equipment such as gas mask for organic gas

(if high concentration, wear air-supplied respirator).

For hands: Wear the gloves designated by manufacturer.

For eyes: Wear the eye protector designated by manufacturer.

For skin and Boy: Wear protect boots, oil resistant apron (impermeable and antistatic) and protect clothes

(antistatic) designated by manufacturer.

Hygiene Measure

Check the protect equipments regularly with check sheet. Clean hands well after use this product

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form

Condition (20) liquid
Odor alcoholic oder
Boiling point No date
Vapor pressure No date
Density (20) No date
pH (against water base) No date

Other Nothing

Hazardous Information Flash point about 18 (closed cup)

Ignition point No date
Explosion limit No date
Nothing

Other Hazardous Information

10. STABILITY AND REACTIVITY

Stability: Under usually storage condition, it is stable.

Hazardous Reactivity: Nothing
Avoid Condition Nothing
Avoid Touching Nothing
Hazardous Decomposition Product:

Generates harmful gas such as carbon monoxide and carbon dioxide.

11. TOXICOLOGICAL INFORMATION

Harmful ingredient and exposure limit.

Name	ACGIH (TLV)	IARC	OTHER
Ethyl alcohol	1000 ppm	1	LD50 = 5ppm (rat oral)
Isopropyl alcohol	400 ppm	-	LD50 = 3437ppm (rat oral)
n-Propyl alcohol	200 ppm	-	LD50=1870mg/kg (rat oral)
Propylene glycol mono methyl ether	100 ppm	-	LD50=5000mg/kg (rat oral)
Dipropylene glycol mono methyl ether	100 ppm	-	LD50=5.1g/kg (rat oral)

Other harmful information relecant to composition:

Harmful information for product:

No data

12. ECOLOGICAL INFORMATION

Acute Hazardous Aquatic Eenvironment No data Inveteracy Hazardous Aquatic Environment No data

13. DISPOSAL CONSIDERATIONS

Residue Waste: For dispose, follow the related regulation and standard of local governments. Ask the licensed

industrial waste disposal company or local governments.

For Burning: Spray the incinerator with waste liquid directly or mix with flammable solvent in small quantity to burn

Activated sludge process.

Polluted container and package: Clean the container and recycle or treat it in accordance with the related regulation

or local governments. If dispose the container, remove the content completely.

14. TRANSPORT INFORMATION

Common: Please follow the section7. Check if there are no leakage from container and take cargo without

falling, dropping and damage.

Land Transportation: In case of fall under the Fire Law, Industrial Safty and Health Law, Poisonous Material Control Law

follow each relevent mode of transportation.

Marine Transportation: Please follow the Law for Safety of Vessel.

Air Transportation: Please follow the Aviation Law and regulation of ICAO.

UN No. N/A GUIDELINE N 128

15. REGULATORY INFORMATION

Industrial Safety and Health Law: Notice object goods (Article 57, section 2, Enforcement regulation 18-21, appendix 9.)

Fire Law: N/A
Law for Safety of Vessel N/A
Aviation Law: N/A

16. OTHER INFORMATION

Main cited ite

JPMA "Data Base for raw material MSDS"

JPMA "MSDS Guide Book [Mixture (for paint)]" 4th version

JPMA "MSDS Guide Book [Mixture (for paint)]" 4th version-addenda version

Solvent pocket book

Raw material manufacturer MSDS

Regarding to the description content:

The description content of this data sheet is based on the documentation, information and data that we can garner at the present moment so that it might be change depend on new information. And it is recommend for usual handling so that in case of special handling, use it before take safety measure that suitable for your application and usage.

The description content is indormation dervice and not certification.