

SAFETY DATA SHEET

DATE •• 04-Jul-2013

REVISION ..

1. PRODUCT INFORMATION

Product Name: Calligraph duo 3002

Product Number: 3002 A6

Recommend Application: Marker (as ink)

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

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2. HAZARDS IDENTIFICATION

GHS Classification

N/A Physical hazardous nature Flammable liquid No data Dengerous for health Acute toxicity Acute toxicity (Oral) Category 5 Acute toxicity (Endermatic) No data Acute toxicity (Inhale : Gas) No data Acute toxicity (Inhale : Dust, Mist) No data Skin corrosion / irritative Category 3 Serious irritate the eves Category 2B

Sensitizing property of apparatus
No data
respiratorius and skin

Skin sensitizing property
Generate cell mutagenicity
No data
Carcinogen
Category 2
Reproductive effect
Category 1B

Specially Target Organ Single exposure Category 1
/ Systematic Toxicity (Central ne

(Central nervous system, Kidney, Heart, Respiratory

system)

No data

Repetition exposure Category 1

(Central nervous system, Respiratory system, Heart)

Attractant respiratory harmful effect No data
Acute hazardous aquatic environment No data

Label elements



Signal words Danger

Hazardous Property for

Environment

Hazardous Information It is harmful, if you swallw. Mild irritate the skin. Serious irritate the eye.

It is harmful for reproductive ability or embryo.

Hazard for the organ (central nerve system, apparatus respiratorius, heart) Hazard for the organ (central system, kidney, heart, apparatus respiratorius)

Inveteracy hazardous aquatic environment

by exposed long term.

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

To prevent from exposure, use personal protective equipment or ventilation. Wear protective gloves, glasses and face mask. Use this product in the well vetilated area or outside only.

Do not inhale the mist, vapor and spray. Keep the container air tight.

If a fire occur, fight a fire in the proper way. · First Aid· ·

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 dothes immediately.

Exposure: See a doctor.

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

Keep the container air-tight, store in the cool and well ventilated area and locked. · 6torage · ·

For dispose the content and container, entrust to the special waste disposer authorized by the • Disposal• •

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.%
Ethylene glycol	107-21-1	4.1 - 10
Carbon Black	1333-86-4	0 - 1.8

4. FIRST AID

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

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

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.

Put off the contacts if possible, and continue to clean. Clean the eyes carefully for a few minutes. For Eyes If the eyes get this product, clean the eye immediately andwash away completely. If the cleaning

eyes not enough, it may cause irreversible eye damage.

If irritate to the eyes continue, see a doctor.

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

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: Small fire / Carbon dioxide, dry chemical extinguishing media, water spray, alcoholic resistance

fire foam.

Great Conflagration: Water spray, mist water, alcoholic resistance fire form.

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.

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

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, siver, 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 contaainer 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 precision.

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 Odorless
Boiling point Approx. 100**
Vapor pressure No data

Density (20•) 1.07 - 1.13 (reference value)

pH (against water base) 5.9 - 10.5 Other No data

Hazardous Information
Flash point
Ignition point
Explosion limit
N/A
Other Hazardous Information
No data

10. STABILITY AND REACTIVITY

Stability: Under usually storage condition, it is stable.

Hazardous Reactivity: Nothing Avoid Condition Nothing Avoid Touching Nothing

Hazardous Decomposition Product: Nothing

11. TOXICOLOGICAL INFORMATION

Harmful ingredient and exposure limit.

	Name	Exposure Limit	ACGIH (TLV)	IARC	OTHER
- 1	Ethylene glycol	-	Max 100 mg/m3		LD50(oral, rat) 4000 - 10200 mg/kg
1	Carbon black	•	3.5 mg/m3	2B	LD50(oral, rat) 15400 mg/kg

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 disposa; companyy or local governments.

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

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.

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 Literature

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 gamer 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.