04878-XXXX

DATE: REVISION: 07-Jun-2010 10-Sep-2018

1. PRODUCT INFORMATION Product Name: Product Number: ZIG CALLIGRAPHY PEN 1.0, 2.0, 3.0 (Oblique Tip) PC-100, PC-200, PC-300	
ZIG CALLIGRAPHY PEN 1.0, 2.0, 3.0 (Square Tip) PC-110, PC-210, PC-310	
Recommend Application: Marker (as ink)	
Company Information: Company Name: KURETAKE CO., LTD.	
Address: 576 Minamikyobate-cho, 7-chome, Nara-shi, 630-8670	
Division: Laboratory	
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 hazards Flammable liquid Not Classification	
Health hazards Acute toxicity Not Classification	
Skin corrosion / irritative Category 3(only Black)	
Serious eye damage / eye irritation Category 2A(only Black) Sensitizing property of apparatus respiratorius Not Classification	
Sensitizing property of apparatus respiratorius Not Classification Skin sensitizing property Category1(only Black)	
Generate cell mutagenicity Not Classification	
Carcinogen Not Classification	
Reproductive effect Not Classification	
Specially Target Organ Single exposure Not Classification	
/ Systematic Toxicity	
Repeated exposure Not Classification Attractant respiratory harmful effect Not Classification	
Attractant respiratory harmful effect Not Classification Environmental hazards Acute aquatic toxicity No data	
Chronic aquatic toxicity No data	
Hazardous to the ozone layer Out of Division	
Label element	
Pictogram	
Signal words Warning (only black)	
Hazardous Information	
Causes mild skin irritation	
Causes serious eye irritation May cause an allergic skin reaction	
Instruction	
[Measure for Safety]	
Wear eye/face protection.	
Wear protective gloves.	
Avoid breathing dust/fume/gas/mist/vapours/spray.	
Contaminated work clothing should not be allowed out of the workplace.	
[First Aid] IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do	
Continue rinsing.	•
If eye irritation persists, get medical advice/attention.	
Wash hands after handling	
IF ON SKIN: Wash with plenty of soap and water.	
IF skin irritation or rash occurs, seek medical advice/attention.	
If skin irritation occurs, get medical advice/attention.	
Wash contaminated clothing before rinse. [Storage] Store locked up.	
[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: No data	

SAFETY DATA SHEET

Item Numbers: 04878-1001, 04878-1002 KURETAKE CO., LTD. Page 1 of 4 SDS No. MC-1-6

3. COMPOSITION AND INGREDIENT INFORMATION

Single, Mixture: Mixture

Ingredient ar	nd content

Ingredient name	CAS No.	Concentration (wt%)
Triethanolamine(only black)	102-71-6	< 2.0
Dye (water soluble)	-	< 5.0
Water	7732-18-5	> 93

4. FIRST AID

4. F	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 doctor 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	
		Sialorrhea, face flash, cough, dizzy, lethargy, headache, sore throat, deliquim animi barf, vomition
	Most important sign and	
		No data
	Protect the person received	
		Rescuer must wear proper protective equipment according to the situation.
	Special notandum for do	
		Symptom will appear later, so that if the patient exposed excessively, it needs medical follow progress.
5. F	FIRE-FIGHTING MEA	\SURE
	Extinguishing Media:	Small fire / Carbon dioxide, dry chemical extinguishing media, water spray, alcoholic resistance foam.
	Great Conflagration:	Water spray, mist water, alcoholic resistance form.
	Forbidden Extinguishing	Media
	5 5	Cylindrical pouring water.
	Special Dangerous and I	
		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 Exting	
		For fighting fire, wear compressed air open-circuit SBCA and protect equipment for chemical. Fight a fire from up wind.
		right a me nom up who.
6. <i>A</i>	ACCIDENTAL RELEA	ASE MEASURES
		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 low ground. Ventilate before enter the sealed area.
	Notandum for Environme	
		Prevent from influx into the drain ditch, sewer, basement and closed area.
		Take notice not to affect the environment by discharge the paint into the river.
		Take holice hol to allect the environment by discharge the paint into the river.
	Collect Neutralization:	
	Containment or Depuran	
		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 wear 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 notan	idum:			
	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 section10.			
	Keep away from high temperature materials spark and fire, and avoid touching oxidizer 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 eye washing devices and safety shower where handle or stock this product.

Protection Equipment

For apparatus respiratorius:

i oi appaiatas iespi			
	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 Body:	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 Properties	Condition (20°C)	Liquid
	Odor	Odorless
	Boiling point	Approx. 100°C
	Vapor pressure	No data
	Specific gravity (20°C)	1.08-1.10
	pH (against water base)	6.0-10.0
	Other	No data
Hazardous Information	Flash point	N/A
	Ignition point	N/A
	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 Decompositio	on Product:
·	Generates harmful gas such as carbon monoxide and carbon dioxide.

11. TOXICOLOGICAL INFORMATION

Harmful ingredient and exposure limit.

	Name	ACGIH (TLV)	IARC	OTHER
	Triethanolamine(only black)	5mg/m3	3	LD50 7269mg/kg (rat, oral)
Othe	er harmful information relevant t	o composition:		No data
	mful information for product:			No data
Acut	DLOGICAL INFORMATIO te Hazardous Aquatic Environm teracy Hazardous Aquatic Envir	ent:		No data 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 Safety and Health Law, Poisonous Material Control Law follow each relevant 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.	Ν/Α
Packing group	N/A

15. REGULATORY INFORMATION

Regulatory information with regard to this substance in your country or region should be examined by your own responsibility.

16. OTHER INFORMATION

Main cited item

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 SDS

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 information service and not certification.

N/A = Not Applicable