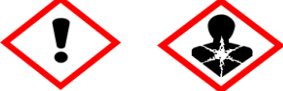


SAFETY DATA SHEETDATE: 06-Mar-2018
REVISION: 27-Apr-2018**1. PRODUCT INFORMATION**

Product Name: ZIG Cartoonist Brush Pen White, ZIG Cartoonist Brush Pen White Cartridge
 Product Number: CNBW-01S, CNDAN122-99
 Recommend Application: Ink

Company Information: Company Name: KURETAKE CO., LTD.
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 Division: Laboratory
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2. HAZARDS IDENTIFICATION

GHS Classification		
Physical hazards	Flammable liquids	Out of Division
Health hazards	Acute toxicity (Oral) Acute toxicity (Endermatic) Acute toxicity (Inhale : Gas) Acute toxicity (Inhale : Dust, Mist) Skin corrosion / irritation Serious eye damage / eye irritation Respiratory or skin sensitization Skin sensitizing property Germ cell mutagenicity Carcinogenicity Reproductive Toxicity	Not Classification Not Classification Not Classification Not Classification Not Classification Category 2B Not Classification Not Classification Not Classification Category 2 Category 1B
Specific Target Organ / Systemic Toxicity	Single exposure Repetition exposure	Not Classification Category 2 (Central nervous system, Visual organ, Liver)
Enviromental hazards Environment	Aspiration hazards Acute aquatic toxicity Chronic aquatic toxicity Hazardous to the ozone layer	Not Classification Not Classification Not Classification Not Classification
Label element		
Signal words	Danger	
Hazardous Information	May cause eye irritation . Suspected of causing cancer. May damage fertility or the unborn child. May cause damage to organs (Central nervous system, Visual organ, Liver)	

Instruction Do not use this product until read all safety precaution and understand it. Before use, please get
【Measure for Safety】 the operating instruction. Keep this product away from the ignition source such as fever, spark, open flame and high temperature. - NO SMOKING

【First Aid】 To prevent from exposure, use personal protective equipment or ventilation. Wear protective gloves ,glasses and face mask. Use this product in the well ventilated 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.
 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 doctor. If feel bad, see a doctor.

【Storage】

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 No data

3. COMPOSITION AND INGREDIENT INFORMATION

Single, Mixture: Mixture
 Ingredient and content

Ingredient name	CAS No.	Concentration Wt.%
Ethyl alcohol	64-17-5	2.0 - 4.0
Titanium dioxide	13463-67-7	20.0 - 40.0
Isopropyl alcohol	67-63-0	0.1-0.3
Methyl alcohol	67-56-1	0.1 - 0.5
Resin	-	10.0 - 20.0
Water	7732-18-5	35.0 - 70.0

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 temperature. 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: Sialorrhoea Sialorrhoea, face flash, cough, dizzy, lethargy, deliquim animi barf, vomition

Most important sign and symptom: No data

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.
- 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 Human 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 low ground.
Ventilate before enter the sealed area.
- Notandum for Environment:
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.
- 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 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 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 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 Form	Condition (20°C)	liquid
	Odor	Odorless
	Boiling point	Approx. 100°C
	Vapor pressure	No data
	Specific gravity (20°C)	1.08-1.25
	pH (against water base)	>7
	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 Decomposition Product: Nothing

11. TOXICOLOGICAL INFORMATION

Harmful ingredient and exposure limit.

Name	Exposure	ACGIH (TLV)	IARC	OTHER
Ehtyl alcohol	-	1000ppm	1	LD50(oral, rat) 6,200-15,000mg/kg
Titanium dioxide	-	10mg/m ³	2B	LD50(oral, rat) > 10,000mg/kg
Isopropyl alcohol	-	200ppm	3	LD50(oral, rat) 1870-5500mg/kg
Mehtyl alcohol	-	200ppm	3	LD50(oral, rat) 6200-9100mg/kg

Other harmful information relevant to composition:

No data

Harmful information for product:

No data

12. ECOLOGICAL INFORMATION

Acute Hazardous Aquatic Environment

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 section 7. 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.	N/A
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 MSDS DFGOT (1996) IUCLID (2000)
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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