DATE: 24-Aug-2011 REVISION: 24-Jul-2013

1. PRODUCT INFORMATION

Product Name: ZIG POSTERMAN Product Number: PMA-20, PMA-25, PMA-30, PMA-50, PMA-120, PMA-120S, PMA-130, PMA-130S, PMA-150 Recommend Application: Ink

Company Information:	Company Name:	KURETAKE CO., LTD.
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	Division:	Technician of Lab.
	Tel:	+81. 742. 50. 2055
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SAFETY DATA SHEET

2. HAZARDS IDENTIFICATION

GHS Classification			
Physical hazardous nature	Flammable liquid	Out of Division	
Dengerous for health	Acute toxicity	Not Classification	
	Acute toxicity (Oral)	Not Classification	
	Acute toxicity (Endermatic)	Not Classification	
	Acute toxicity (Inhale : Gas)	Not Applicable	
	Acute toxicity (Inhale : Dust, Mist)	Not Classification	
	Skin corrosion / irritative	Not Classification	
	Serious irritate the eyes	Not Classification	
	Sensitizing property of apparatus respiratorius and skin	Not Classification	
	Skin sensitizing property	Not Classification	
	Generate cell mutagenicity	Not Classification	
	Carcinogen	Not Classification	
	Reproductive effect	Category1A-1B(except black)	
Specially Target Organ / Systematic Toxicity	Single exposure	Division1 (Central nervous system,Kidney,Heart Systemic toxicology/ Fluorescence color)	
	Repetition exposure	Division1 (Liver /except black, metallic colors)	
		Division1 (Central nervous system,Heart, Respiratory organ/ Fluorescence color)	
		Division2(Central nervous system	
		/except black, metallic colors)	
	Attractant respiratory harmful effect	Not Classification	
Hazardous Property for	Acute hazardous aquatic environment	Not Classification	
Environment	Inveteracy hazardous aquatic environment	Not Classification	
Factore Label			
Signal words	Danger		
Hazardous Information			
	ause genetic defects.		
	amage fertility or the unborn child.		
	d for the organ (Central nervous system,Kidney,		
Hazar	d for the organ (Liver,Central nervous system,He	eart,Respiratory organ)by exposed long term.	
[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,		
	lame and high temperature NO SMOKING	r the ignition source such as rever, speak,	
To pre	event from exposure, use personal protective equ	uipment or ventilation. Wear protective	
•	s,glasses and face mask. Use this product in the	• •	
Do no	t inhale the mist, vapor and spray.Keep the cont	ainer 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 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 authoriz

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

Mixture

Single, Mixture: Ingredient and content

(First Aid)

Ingredient name	CAS No.	Concentration Wt.%
Ethyl alcohol	64-17-5	2-4
Carbon black(in four colors only)	1333-86-4	
	Black	9-10
	Brown	<0.5
	Slate Grey	<0.5
	Burnt Sienna	<0.5
Titanium dioxide(except black)	13463-67-7	7.5-15.5

4. FIRST AID

5.

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 andwash 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 sympto	om and late symptom: Sialorrhea, face flash, cough, dizzy, lethargy,headache, sore throat,
	deliquim animi barf, vomition
Most important sign an	d syptom:
Protect the person rece	eived first aid:
	Rescuer must wear proper protective equipment according to the situation.
Special notandum for d	loctor: Symptom will appear later, so that if the patient exposed excessively, it needs medical
	follow progress.
FIRE-FIGHTING ME	ASURE
Extinguishing Media:	Small fire / Carbon dioxide dry chemical extinguishing media, water spray alcoholic resistance

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.

Item Numbers: 21309-0039, 21309-1003, 21309-1005, 21309-2003, 21309-2005, 21309-3005, 21309-3005, 21309-3065, 21309-3063, 21309-3253, 21309-3255, 21309-3485, 21309-3485, 21309-4003, 21309-4005, 21309-4223, 2150 A 253, 21309-4505, 21309-4565, 21309-4565, 21309-4565, 21309-5005, 21309-5015, 21309-5015, 21309-515, 21309-505, 21309-6503, 21309-6603, 21309-6613, 21300

MSDS for #21309 - ZIG POSTERMAN BIGGIE 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 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.

Protect the Person Extinguish a Fire: None

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 section10 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).
	(in high concentration, wear an-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.
 na Maaaura	

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	Oderless
	Boiling point	Approx. 100
	Vapor pressure	N.D.
	Density (20)	1.08-1.25
	pH (against water base)	N.D.
	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

STABILITT AND RE		
Stability:	Under usually	storage condition, it is stable.
Hazardous Reactivity:	Nothing	
Avoid Condition	Nothing	
Avoid Touching	Nothing	
Hazardous Decomposition	on Product:	Nothing

11. TOXICOLOGICAL INFORMATION Harmful ingredient and exposure limit

Name	Exposure Limit	ACGIH (TLV)	IARC	OTHER
Ehtyl alcohol	-	1000ppm	A4	LD50 (oral, rat) > 5g/kg
Carbon black	-	3.5 mg/m ³	2B	LD50(oral, rat) 15,400mg/kg
Titanium dioxide	-	10mg/m ³	A4	LD50(oral, rat) > 10,000mg/kg

Other harmful information relecant to composition: Harmful information for product:

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: UN No.	Please follow the Aviation Law and regulation of ICAO. N/A

15. REGULATORY INFORMATION

Industrial Safety and Health Law:	Notice object goods (Article 57, section 2, Enforcement regulation 18-21, appendix 9.)
Fire Law:	Ν/Α
Law for Safety of Vessel	Ν/Α
Aviation Law:	Ν/Α

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No data

No data

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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 DFGOT (1996) IUCLID (2000)

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.

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