

Product Safety Data Sheet

1. Product and Company Information

Product name PGB Clover 1/2 (Clover 1/2)
Manufacturer : Sakura Color Products Corp.
Address : 1-6-20 Morinomiya Chuo, Chuo-Ku, Osaka, Japan
Tel No. : 06 - 6910 - 8816
Fax No. : 06 - 6910 - 8832

Product Code No. : PGB Clover 1/2
File No. : PGB Clover 1/2-002

2. Composition Information on Ingredients

Monomorphic or Compound : Compound
General Product Name : Water Soluble Chalk Pen

Hazardous Compounds & Contents:

Components	Contents	Official Gazzete No.	CAS No.
Propylene glycol	5.3 %	(2) - 234	57-55-6

3. Hazardousness

Most Hazardousness

Toxicity : Not known
Environmental Effect : Not known
Physical & Chemical Risk : Least risk for fire under a normal use.
Name of category (under Japan standard) : Not applicable to
Classificatory Criterion in Japan.

4. Emergency Measure

In case hazardous material was inhaled : If any subjective symptom may be found, move to a place to get fresh air, try to lie quietly and keep warm, and then receive doctor' s treatment immediately.

In case skin was exposed : Wash out polluted parts with water using soap, etc. Should any inflammation or eruption be caused, receive doctor' s treatment immediately.

In case eye(s) was (were) exposed : Wash out with clean water for 15 minutes or more, and receive doctor' s treatment immediately.

In case hazardous material was swallowed : Do not vomit it forcibly, and receive doctor' s treatment immediately.

5. Measure When Fire Caused

Extinguishing media : Use powder, carbonic acid gas, dry sand, etc.

Extinguishing media not to be used : Nothing in particular.

Way of extinguishing fire : Shut off burning source to the source of fire, and extinguish the fire using a proper, suitable extinguishing media.

Try to extinguish the fire from the windward as much as possible so that avoid any inhalation of hazardous gas.

Way to protect a person when extinguishing fire : Put on a proper protective equipment (such as gloves, glasses, etc.) when extinguishing fire.

6. Measures When Hazardous Material Was Leaked Out

Notice to human body : Nothing in particular.

Notice to environment : Pay good attention not to discharge hazardous materials into river, etc. so that any wrong effect wouldn' t cause in the environment.

Removal Method : When the amount is not much (or little) absorb it to something like cloth, etc., and correct it into a container shutting it off tightly.

7. Points, Attention to be Paid When Handle and Store

Handle :

Measure on technic : Nothing in particular.

Notice to be paid : Nothing in particular.

Notice specifically paid on Safety : Nothing in particular.

Store :

Proper condition for storing : Avoid direct sunlight, and not store in a place where temperature is getting high. Avoid direct sunlight, and keep it away from a fire or heat source.

Safety Container and/or Package : Nothing in particular.

8. Measure to Prevent from Exposure

Measure for facility : No need to take anything special under a normal use.

Maximum allowable concentration:

Components	Administrative	Japan Association	ACGIH
	Levels	of Industrial Health	
		(2001 Edition)	(2001 Edition)

No special ingredient applicable

Protecting Tool : No need for normal use.

9. Physical and Chemical Properties (Ink)

Physical condition

Shape : Liquid, directly contained in the body of Pen.

Color : White.

Fragrance : Almost no smell.

pH : 8.5 to 10.5

Specific temperature/temp. area, physical condition to be changed:

Boiling point : About 100° C

Melting point : No data available

Steam pressure : No data available

Density : 1 and more

Solubility : Solubility against organic solvent. Soluble in water.

10. Stability and Reacting Level

Stability : Stable under expectable, normal handling conditions.

Reacting-level : Cause a chemical reaction with a strong oxidizing compound and acid.

Materials to be avoided : Strong oxidizing compound and acid.

Hazardous degradation : May possibly arise a hazardous gas like CO, NOx, etc. when burning.

11. Information on Hazardousness

As there is no data available about an acute toxicity (as a product), describe an ingestion value in rats instead.

Propylene glycol 20,000mg/kg

12. Ecological Information

No knowledge available for the moment

13. Points Attention to be Paid When Dispose
Disposal should be done following the act, rule and standard of National, and Local governments.
14. Caution for Transportation
Make sure no leak of contents nor breakage on container/package were occurred.
15. Applicable Law
On product : Nothing in particular
On materials : Fire Service Act, Type 4, Class 3 - petroleum and water soluble liquids (propylene glycol).
16. Other Information
Reference data : Guidelines to make MSDS (Revised) - Issued by Japan Chemical Industry Association (JCIA)
MSDS of each raw material mixture - By each manufacture.
Chemical products in 402 - The Chemical Daily Pte. Ltd., Japan

* This MSDS does not mean to provide any guarantee for safety. Please, therefore, use this MSDS as just a reference information for handling this product, and take a proper measures basing on the reality occurred and users' responsibility.