

MATERIAL SAFETY DATA SHEET

MSDS No. EA-TMOP-002

Date Revised: 2/Feb/2006

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : Text Mark Opaque Marking Pen No. 250
Color: Red, Blue, Green, Yellow
MANUFACTURER'S NAME Teranishi Chemical Industry Co., Ltd.
MANUFACTURER'S ADDRESS 13-11, Ikue 2-chome, Asahi-ku, Osaka 535-0004, Japan
Telephone Number : 81-6-6928-3101
Facsimile Number : 81-6-6928-3111

2. COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL PRODUCT : Mixture (Oil based marking pen's ink)

COMPONENTS	CAS No.	ACGIH TLV-TWA	%BY WEIGHT
m-Xylene	108-38-3	100 PPM	48~57
Resin	Not open	-	15~23
Pigment (TiO2)	13463-67-7	-	15~28
Color Pigment	Not open	-	5~10

3. HAZARDS IDENTIFICATION

Flammable liquid and acute toxicity substance.

HEALTH HAZARDS

EFFECT OF OVEREXPOSURE : It may be stimulated to the skin and membrane.

4. FIRST AID MEASURES

EYE CONTACT : Flush eye with plenty of water.
SKIN CONTACT : Wash a skin with soap and water.
INHALATION : Remove to fresh air. Keep at rest.
INGESTION : If Swallowed, it is not made to vomit. Call a physician.

5. FIRE-FIGHTING MEASURES

FIRE-FIGHTING PROCEDURE : Extinguish with foam or dry Chemical.

EXTINGUISH MEDIA : Dry chemical powder, CO2 or chemical foam.

6. ACCIDENTAL RELEASE MEASURES

METHOD FOR CLEANING UP : Wipe up the spilt ink with absorbent material.

WASTE DISPOSAL METHOD : Burn the material which absorbed ink or dispose in accordance with local state and federal regulations.

7. HANDLING AND STORAGE

HANDLING : Avoid high temperature and fire. Keep cap on marker when not in use.
When using for a long time, ventilate well. Do not shake marker.
STORAGE : Store away from direct sunlight. Keep away from heat, spark and
flame. Keep away from reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMIT : See section 2
VENTILATION : When using for a long time, ventilate well.
PERSONAL PROTECTION EQUIPMENT
EYE : None under normal use conditions.
SKIN : None under normal use conditions.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE : Liquid
COLOR : Red, Blue, Green and Yellow
ODOR : Solvent odor
BOILING POINT : Between 138 and 144 DegC
FLASH POINT : About 25.0 DegC
VAPOR PRESSURE (20 DegC) : About 4.5~4.7 mmHG
SOLUBILITY IN WATER : Insoluble
SPECIFIC GRAVITY : 1.3
PERCENT VOLATILE BY VOLUME : 48~57%
VAPOR DENSITY (air=1) : 3.7

10. STABILITY AND REACTIVITY

STABILITY : Stable.
HAZARDOUS POLYMERIZATION : Will not occur.
HAZARDOUS DECOMPOSITION : No
INCOMPATIBILITY : None

11. TOXICOLOGICAL INFORMATION

ACUTE: Not data available
CHRONIC: The inks comply with the requirement of EN71.Part3 (limits of 8
elements).

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATION

Dispose in accordance with local state and federal regulations.
It does not throw away into fire, even if it use up .

14. TRANSPORT INFORMATION

UN NUMBER : 1210
IMO CLASS : 3
ICAO/IATA CLASS : 3
PACKAGING GROUP : III

15. REGULATORY INFORMATION

CLASSIFICATION AND LABELLING
CLASSIFICATION : Flammable
CLASSIFICATION : Harmful
Dangerous Substances Directive 67/548/EC

16. OTHER INFORMATION

In Section 2 : ACGIH TLV : 2001

The EU directive 2003/11/EG can be confirmed, since this product is free from flame retardants .

The information on this data sheet represents our current data and best opinion as to the proper use in handling of the product under normal foreseeable conditions.



prepared by chief of laboratory