

ISSUE NUMBER : Q1-100WS001-05-E ISSUE DATE: April 9, 2010

1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : White marker (Fine bullet point)

COMPANY NAME : PENTEL CO.,LTD
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 DEPARTMENT : QUALITY ASSURANCE DEPARTMENT

PRODUCT CODE : X100W-S
 Ink was changed from November 2009 production.

2 COMPOSITION/INFORMATION ON IDENTIFICATION

A SUBSTANCE / A PREPARATION ; A PRAPARATION

《 CHEMICAL NAME 》	《 CONCENTRATION 》	《 CAS No. 》
Propylene Glycol Monoethyl Ether	39.1%	1569-02-4
Ethyl Lactate	14.0%	97-64-3
n-Propyl Alcohol	9.8%	71-23-8
Benzyl Alcohol	2.8%	100-51-6
Titanium Dioxide	21.0%	13463-67-7
Nitrocellulose	4.8%	9004-70-0
Gum Rosin	4.2%	8050-09-7
Citric acid, tributyl ester, acetate	3.6%	77-90-7

3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW : Flammable liquid
 • Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

HAZARDS

HEALTH EFFECTS : N/A
 ENVIRONMENTAL EFF : N/A
 PHYSICAL/CHEMICAL : N/A
 SPECIFIC HAZARDS : N/A

4 FIRST-AID MEASURES

INHALATION : N/A
 EYE CONTACT : Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention, if irritation persists.
 SKIN CONTACT : Immediately wash skin with soap and plenty of water. remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.
 INGESTION : Immediately wash mouth with plenty of water. If swallowed, do not induce vomiting. Get medical attention if symptoms occur.

5 FIRE-FIGHTING MEASURES

FIRE-FIGHTING METHO : Use following extinguishing media.
 EXTINGUISHING MEDIA : Carbon dioxide, dry chemical, form chemical

6 ACCIDENTAL RELEASE MEASURES

LAND SPILL : Absorb the liquid and scrub the area with detergent and water.
 WATER SPILL : N/A

7 HANDLING AND STRAGE

HANDLING : Keep away from sources of ignition, heat, and direct sunlight. Direct sources of heat must be avoid.
 STORAGE : Store away from sources of ignition, heat, and direct sunlight. A moderately cool, dry, well-ventilated area.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROL : for normal use; No special controls are needed.

PERSONAL PROTECTIVE EQUIPMENT:

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EYE : No special equipment are needed.
SKIN/BODY/HAND : No special equipment are needed.
RESPIRATORY : No special equipment are needed.

EXPLOSURE GUIDELINE : N/A

9 PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE : Liquid
APPEARANCE : Pen(White permanent and water--proof marker)
COLOR : 1 color (white)
ODOR : peculiar smell
PH : N/A
BOILING POINT : N/A
MELTING POINT : N/A
VAPOUR PRESSURE : N/A
VAPOUR DENSITY : N/A
SOLUBILITY IN WATER : insoluble
VISCOSITY : N/A

10 STABILITY AND REACTIVITY

CHEMICAL STABILITY : STABLE AT ROOM TEMPERATURE
CONDITION TO AVOID : Avoid temperatures above 40°C
Store away from sources of ignition,heat,and direct sunlight.

11 TOXICOLOGICAL INFORMATION

ACUTE TOXICITY : N/A
EYE EFFECTS : N/A
SKIN EFFECTS : N/A
CHRONIC EFFECTS : N/A
CARCINOGENICITY : N/A

12 ECOLOGICAL INFORMATION

: N/A

13 DISPOSAL CONSIDERATIONS

Comply with national and local regulations.
Do not dump this material into sewers,on the ground or into any body of water.

14 TRANSPORT INFORMATION

FLASH POINT : 35.2°C
UNNo : 1263

Comply with national and local regulations.
See above Section 7,"HANDLING AND STRAGE"

15 REGULATORY INFORMATION

N/A

16 OTHER INFORMATION

NONE

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