

ISSUE NUMBER : Q1-NN500001-02-E ISSUE DATE: Mar.1, 2006

1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : Permanent marker
 COMPANY NAME : PENTEL CO.,LTD
 ADDRESS : 7-2 KOAMI-CHO NIHONNBASHI CHUO-KU TOKYO 103-8538 JAPAN
 TELEPHONE No. : 03(3667)3333
 DEPARTMENT : QUALITY ASSURANCE DEPARTMENT
 PRODUCT CODE : NN50(bullet point)-A (Black),-B(Red),-C(Blue),-D(Green)
 NN60(chisel point)-A (Black),-B(Red),-C(Blue),-D(Green)

2 COMPOSITION/INFORMATION ON IDENTIFICATION

A SUBSTANCE / A PREPARATION ; A PRAPARATION

《 CHEMICAL NAME 》	《 CONCENTRATION 》	《 CAS No. 》
Ethyl alcohol	50-71%	64-17-5
※2 N-propanol	14%	71-23-8
Isopropyl alcohol	7-12%	67-63-0
Benzyl alcohol	4-5%	100-51-6
※1 Propylene glycol monoethyl ether	10%	52125-53-8
※2 Rosin	7%	8050-09-7
※2 Alkyl benzene sulphonic acid	4%	68584-22-5

※1 Only used for NN50-C
 ※2 Only used for NN50-A

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 symtonms 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 METHC : 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

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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 CONTRO : for normal use;No special controls are needed.

PERSONAL PROTECTIVE EQUIPMENT:

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(Permanent and water—proof marker)

COLOR : 4 colors(Black,Red,Blue,Green)

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

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

15 REGURATORY INFORMATION

N/A

16 OTHER INFORMATION

NONE

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