

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 REGULATORY INFORMATION

N/A

## 16 OTHER INFORMATION

NONE

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