1 Identification of Substance

Product Details

Trade Name: Ball Pen Black Ink # 13145, Ball Pen Blue Ink #13134B

Application of the Substance/the Preparation Ball Pen Ink
Used in Pentel RSVP Pens, BK90, BK91, BK93 Black and Blue Pens

Product Supplier:
Pentel of America, Ltd.
2715 Columbia Street
Torrance Ca. 90503
Phone: 909.975.2238
Fax: 909.975.229

Information:
Michael Storie
TQC Manager Pentel of America, Ltd.
Phone: 909.975.2238
Email: mstorie@pentel.com

Emergency Information:
EMERGENCY Tel. 800.421.1972

2 Composition/Data on Components

Chemical Characterization
Mixture of the following substance, containing non-hazardous substances and coloring agents.

Description: Mixture of the substances listed below with non-hazardous additions.

I Ink Components composition #13145 Black:

<table>
<thead>
<tr>
<th>CAS</th>
<th>Description</th>
<th>Min %</th>
<th>Max %</th>
</tr>
</thead>
<tbody>
<tr>
<td>122-99-6</td>
<td>2-phenoxyethanol</td>
<td>40.0%</td>
<td>50.0%</td>
</tr>
<tr>
<td>104-68-7</td>
<td>2-(2-phenoxyethoxy) ethanol</td>
<td>2.0%</td>
<td>5.0%</td>
</tr>
<tr>
<td>57-55-6</td>
<td>Propylene Glycol</td>
<td>0.2%</td>
<td>3.0%</td>
</tr>
<tr>
<td>65294-17-9</td>
<td>Solvent Black 46</td>
<td>15.0%</td>
<td>25.0%</td>
</tr>
<tr>
<td>NA</td>
<td>Special Polyol Resin</td>
<td>15.0%</td>
<td>25.0%</td>
</tr>
<tr>
<td>9003-39-8</td>
<td>Polyvinylpyrrolidone</td>
<td>0.15%</td>
<td>0.35%</td>
</tr>
<tr>
<td>102-60-3</td>
<td>N,N,N’,N’-Tetrazis(HydroxyPropyl Ethylenediamine)</td>
<td>0.4%</td>
<td>1.2%</td>
</tr>
</tbody>
</table>

II Ink Components composition #13134B Blue:

<table>
<thead>
<tr>
<th>CAS</th>
<th>Description</th>
<th>Min %</th>
<th>Max %</th>
</tr>
</thead>
<tbody>
<tr>
<td>122-99-6</td>
<td>2-phenoxyethanol</td>
<td>44.0%</td>
<td>54.0%</td>
</tr>
<tr>
<td>104-68-7</td>
<td>2-(2-phenoxyethoxy) ethanol</td>
<td>2.0%</td>
<td>5.0%</td>
</tr>
<tr>
<td>57-55-6</td>
<td>Propylene Glycol</td>
<td>0.2%</td>
<td>3.0%</td>
</tr>
<tr>
<td>1328-51-4</td>
<td>Solvent Blue 38</td>
<td>8.0%</td>
<td>14.0%</td>
</tr>
</tbody>
</table>
Ball Pen Black Ink #13145 and Blue Ball Pen Ink #13134B
52080-58-7 Solvent Violet 8 2.0 5.0%
NA Special Polyl Resin(NJTSR No.56705700001-5190P)23.0% 33.0%
9003-39-8 Polyvinylpyrrolidone 0.15% 0.35%
102-60-3 N,N,N’,N’Tetrakis(HydroxyPropyl Ethylenediamine 0.2% 1.0%

Additional Information: For the wording of the listed risk phrases refer to section 16.

3 Hazards Identification

Hazard Description:

Information Pertaining to Particular Dangers for Man and Environment:
Exposure limits in air
Health effects or risks from exposure: Non-hazardous

Symptoms of over exposure for each potential route of exposure:
Harmful if swallowed.
Irritating to skin.
Irritating to eyes.

Classification System:
The classification was made according to the latest editions of international substances lists and expanded upon from company and literature data.

NFPA Ratings (scale 0-4)

<table>
<thead>
<tr>
<th></th>
<th>Health</th>
<th>Fire</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td></td>
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</tbody>
</table>

HMIS Ratings (scale 0-4)

<table>
<thead>
<tr>
<th></th>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
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<td>1</td>
<td>0</td>
</tr>
<tr>
<td>FLAMMABILITY</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>REACTIVITY</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4 First Aid Measures

General Information:
Exposure limits in air.
Acute: None known
Chronic: None known

After Inhalation:
Little hazard exists at room temperature. Remove individual to an uncontaminated atmosphere and administer oxygen or artificial respiration as needed.

After Skin Contact:
No expected absorption through skin. Remove contaminated clothing and wash affected area with plenty of water and soap. Colors the skin and may cause drying.
Ball Pen Black Ink #13145 and Blue Ball Pen Ink #13134B

**After Eye Contact:**
Flush eyes for at least 15 minutes with large amounts of water. Get medical attention if eye pain persists.

**After Swallowing:**
No expected issues. Call a physician.

## 5 Fire Fighting Measures

**Suitable Extinguishing Agents:** Use fire fighting measures that suit the environment. Water, foam, carbon dioxide are effective agents.

**Protective Equipment:** Fire fighters should be fitted with self-contained breathing apparatus to avoid inhalation of products of combustion.

## 6 Accidental Release Measures

**Person-related Safety Precautions:** Not required.

**Measures for Environmental Protection:**
Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers/surface or ground water.

**Measures for Cleaning/Collecting:**
Soak up all spills on paper, sawdust, earth or other suitable absorbents and scoop into closed containers. Wash down spill area with plenty of water.
Ball Pen Black Ink #13145 and Blue Ball Pen Ink #13134B

7 Handling and Storage

Handling:
Information for Safe Handling:
Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols. Local exhaust as needed to remove fumes if any.
Information about Protection against Explosions and Fires: No special measure required.

Storage:
Requirements to be met by Storerooms and Receptacles: Do not store outside. Keep container closed when not in use.
Information about Storage in One Common Storage Facility: Not required.
Further Information about Storage Conditions: Do not expose to extreme temperatures.

8 Exposure Controls and Personal Protection

Additional Information about Design of Technical Systems: No further data; see item 7.
Components with Limit Values that Require Monitoring at the Workplace: None.
Additional Information: The lists that were valid during the creation were used as basis.

Personal Protection Equipment:
General Protective and Hygienic Measures:
Keep away from foodstuffs, beverages, and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the skin. Avoid contact with the eyes and skin.

Breathing equipment:
Necessary only if the ink is heated. Use an approved respirator for organic vapors and fumes.

Protection of Hands:

The glove material has to be impermeable and resistant to the product/the substance/the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of Gloves:
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application. Medical quality plastic gloves are used in the making of the ink.
**Material Safety Data Sheet**
acc. to ISO/DIS 11014

Ball Pen Black Ink #13145 and Blue Ball Pen Ink #13134B

**Penetration Time of Glove Material:**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye Protection:**
- Tightly sealed goggles

**Respiratory Protection:**

### 9 Physical and Chemical Properties

**General Information**
- **Form:** Black/Blue Viscous Liquid
- **Color:** Black/Blue
- **Odor:** Characteristic
- **Important Information on Protection of Health and Environment, and on Safety:** Not Applicable

**Change in Condition:**
- **Melting Point/Melting Range:** N/A
- **Boiling Point/Boiling Range:** 425°F

**Flash Point:** 221°F

**Ignition Temperature:** None

**Auto Ignition:** No

**Danger of Explosion:** None known

**Explosion Limits:**
- **Lower:** N/A
- **Upper:** N/A

**Vapor Pressure:** MM hg @ 620°C (68°F) 0.05

**Vapor Density:** (Air=1) 4

**Solubility in/Miscibility with Water:** Slight

**Evaporation Rate (But. Acetate = 1):** Approx. 0.005

**Specific Gravity:**
- **(Water = 1) 1.1350-1.1550**
- **Aromatic**

**Odor:**
- **Black #13145**
- **Blue #13134B**

**pH-Value @ 25°C:**
- 5.5-7.5 Black #13145
- 7.5-9.5 Blue #13134B
Ball Pen Black Ink #13145 and Blue Ball Pen Ink #13134B

Viscosity:

Dynamic @ 25°C:

8,000 ± 1,500 CPS Black #13145
6,500 to 8,500 CPS Blue #13134B

Solvent Content:

Organic Solvents: Black 55.85% Blue 59.5%
Solids Content: Black 44.15% Blue 40.5%

10 Stability and Reactivity

Thermal Decomposition/Conditions to be Avoided:
No thermal decomposition known. No conditions to be avoided. Avoid strong oxidizing agent materials.

Dangerous Reactions:
This ink is stable. There are no known dangerous reactions.

Dangerous Products of Decomposition:
Carbon monoxide and carbon dioxides of nitrogen. No hazardous polymerization will occur.

11 Toxicological Information

Acute Toxicity:
None known.

Primary Irritant Effect:
On the Skin: Irritant to skin.
On the Eyes: Irritant to eyes.

Sensitization: No sensitizing effects known.

Additional Toxicological Information:
Harmful Irritant

12 Ecological Information

Ecotoxicological Effects:
Remark: Toxic for any animals/fish, etc.

General Notes:
Slightly hazardous in water. Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water and also poisonous for fish and plankton in water bodies. Toxic for aquatic organisms.

13 Disposal Considerations

Product:

Recommendation:
Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Remove to an approved landfill site. Dispose of all wastes in accordance with federal, state, and local regulations.

Uncleaned Packaging:

Recommendation: Disposal must be made according to official regulations.
14 Transport Information

Transportation Regulations:
This material is not flammable or hazardous.
Shipping code: 55

Sea Transport
IMDG
Not classified as a dangerous good under transport regulations (Non-Hazardous)

Air Transport
IATA/ICAO
Not classified as a dangerous good under transport regulations (Non-hazardous)

15 Regulations

Sara
Section 355 (extremely hazardous substances):
None of the ingredients are listed.
Section 313 (specific toxic chemical listings):
None of the ingredients are listed.

TSCA (Toxic Substances Control Act):
122-99-6 2-Phenoxyethanol

Proposition 65
Chemicals Known to Cause Cancer:
None of the ingredients are listed.
Chemicals Known to Cause Reproductive Toxicity for Females:
None of the ingredients listed.
Chemicals Known to Cause Reproductive Toxicity for Males:
None of the ingredients listed.
Chemicals Known to Cause Developmental Toxicity:
None of the ingredients listed.

Cancergenity Categories
EPA (Environmental Protection Agency)
None of the ingredients are listed.

IARC (International Agency for Research on Cancer)
None of the ingredients are listed.
NTP (National Toxicology Program)
None of the ingredients are listed.
TLV (Threshold Limit Value established by ACGIH)
None of the ingredients are listed.
MAK (German Maximum Workplace Concentration)
None of the ingredients are listed.
NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients are listed.
OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients are listed.

Product Related Hazard Information:
Ball Pen Black Ink #13145 and Blue Ball Pen Ink #13134B
The product has been classified and marked in accordance with directives on hazardous materials.

 Risk Phrases:
Harmful if swallowed.
Irritating to skin.
Risk of serious damage to eyes.
Toxic to aquatic organisms.

 Safety Phrases:
Do not breathe vapor.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Wear suitable protective clothing, gloves and eye/face protection.

Use appropriate container to avoid environmental contamination.

Water Hazard Class: Water hazard class (self assessment): hazardous for water.

16 Other Information

Section 16 - OTHER INFORMATION

Note: This information is furnished without warranty express or implied. This information is believed to be accurate to the best knowledge of Pentel Co., Ltd and Pentel of America, Ltd. We do not assume any legal responsibility for the use of or the reliance of this information.

Consumer Goods as such, office, art and writing instruments in the US must conform to CPSC guidelines in accordance with LHAMA and ASTM D4236 and must be labeled properly to protect the consumer and do not require an SDS or MSDS for this purpose as these are documents used under guidance by OSHA for workplace safety and raw chemical transportation.

This SDS is for the Ink contained in the product as an ingredient in a system used by consumers. The product itself does not require an SDS or MSDS as it is safe when used as intended and has been tested in accordance with LHAMA and ASTM D4236 by Duke University in the ACMI and WIMA Programs and is determined Non-Toxic to humans and requires no labeling of the product itself.

OSHA issues the guidelines to control SDS and MSDS information and these documents are intended to protect workers in the environment they performance of duties in the manufacturing process for the actual products. Potential exposures, handling instructions, recommended PPE and Transportation information contained is for this process and expressly these activities.