

# Material Safety Data Sheet

Printing date 01/14/2009

Reviewed on 01/14/2009

## 1 Identification of substance

- **Product details**

- **Trade name:** *Ink for water color pen*
- **Application of the substance / the preparation:** *Drawing*

- **Manufacturer/Supplier:**

WENZHOU KAIWEN STATIONERY & SPORTS MANUFACTURING CO., LTD.  
135, Simingshan Road, Economy & Development Zone, Wenzhou, China  
Tel: 0577-86558715  
Fax: 0577-86531543

- **Information department:** WENZHOU KAIWEN STATIONERY & SPORTS MANUFACTURING CO., LTD.

- **Emergency information:**

Shirley Zhou  
MP: 13676763495

- **Email:** *Shirleyzhou1983@gmail.com*

- **Reference Number:** *SHT002815128; SH9003956/CHEM*

## 2 Composition/Data on components

- **Chemical characterization**

- **Description:** *Mixture of the substances listed below with nonhazardous additions.*

- **Dangerous components:**

107-21-1	ethanediol	3.0%
54060-92-3	2-[[4-methoxyphenyl)methylhydrazono]methyl]-1,3,3-trimethyl-3H-indolium methyl sulphate	1.3%

- **Non dangerous components:**

7732-18-5	water, distilled, conductivity or of similar purity	80.96%
56-81-5	glycerol	12.0%
12217-48-0	3H-Indolium, 2-(2-(4-((2-cyanoethyl)methylamino)phenyl)ethenyl)-1,3,3-trimethyl-, chloride	2.6%
99-76-3	methyl 4-hydroxybenzoate	0.1%
9002-93-1	polyethylene glycol octylphenol ether	0.04%

- **Remark:**

ethanediol (CAS No. 107-21-1)

Synonym: glycol

2-[[4-methoxyphenyl)methylhydrazono]methyl]-1,3,3-trimethyl-3H-indolium methyl sulphate (CAS No. 54060-92-3)

Synonym: cation orange

glycerol (CAS No. 56-81-5)

Synonym: glycerin

3H-Indolium, 2-(2-(4-((2-cyanoethyl)methylamino)phenyl)ethenyl)-1,3,3-trimethyl-, chloride (CAS No. 12217-48-0)

Synonym: cation bright red

methyl 4-hydroxybenzoate (CAS No. 99-76-3)

Synonym: nipagin

polyethylene glycol octylphenol ether (CAS No. 9002-93-1)

Synonym: TX-10

## 3 Hazards identification

- **Hazard description:** *Not applicable.*

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**Trade name: Ink for water color pen**

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- **Information pertaining to particular dangers for man and environment:**  
The product does not have to be labelled due to the calculation procedure of international guidelines.
- **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)**



Health = 0  
Fire = 1  
Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



Health = 0  
Fire = 1  
Reactivity = 0

## 4 First aid measures

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.

## 5 Fire fighting measures

- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Protective equipment:** Wear fully protective suit.

## 6 Accidental release measures

- **Person-related safety precautions:**  
Wear protective equipment. Keep unprotected persons away.  
Ensure adequate ventilation.  
Keep away from ignition sources.
- **Measures for environmental protection:** Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Additional information:** No dangerous substances are released.

## 7 Handling and storage

- **Handling:**
- **Information for safe handling:**  
Ensure good ventilation/exhaustion at the workplace.  
Keep away from heat and direct sunlight.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Store in a cool location.  
Store only in unopened original receptacles.
- **Information about storage in one common storage facility:**  
Store away from foodstuffs.  
Store away from reducing agents.

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· **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.

## 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:**

### 56-81-5 glycerol (12.0%)

PEL (USA)	15* 5** mg/m <sup>3</sup> *total dust **respirable fraction
TLV (USA)	10 ppm
WEL (Great Britain)	10 mg/m <sup>3</sup>

### 107-21-1 ethanediol (3.0%)

TLV (USA)	Short-term value: C 100 mg/m <sup>3</sup> H
IOELV (EU)	Short-term value: 104 mg/m <sup>3</sup> , 40 ppm Long-term value: 52 mg/m <sup>3</sup> , 20 ppm Skin
WEL (Great Britain)	Short-term value: 104** mg/m <sup>3</sup> , 40** ppm Long-term value: 10* 52** mg/m <sup>3</sup> , 20** ppm Sk *particulate **vapour

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Personal protective equipment**

· **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

· **Breathing equipment:** Suitable respiratory protective device recommended.

· **Protection of hands:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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 can not be calculated in advance and has therefore to be checked prior to the application.

· **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:** Goggles recommended during refilling.

## 9 Physical and chemical properties

· **General Information**

<b>Form:</b>	Liquid
<b>Color:</b>	Red
<b>Odor:</b>	Odorless

· **Change in condition**

**Melting point/Melting range:** Not available.

**Boiling point/Boiling range:** Not available.

· **Flash point:** Not available.

· **Flammability (solid, gaseous):** Not available.

· **Ignition temperature:** Not available.

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· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
<b>Lower:</b>	Not available.
<b>Upper:</b>	Not available.
· <b>Oxidizing properties:</b>	Not available.
· <b>Vapor pressure:</b>	Not available.
· <b>Density:</b>	Not available.
· <b>Relative density</b>	Not available.
· <b>Vapour density</b>	Not available.
· <b>Evaporation rate</b>	Not available.
· <b>Solubility in / Miscibility with Water:</b>	Not available.
· <b>pH-value:</b>	Not available.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not available.

**10 Stability and reactivity**

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions:** No dangerous reactions known.
- **Dangerous products of decomposition:** No dangerous decomposition products known.

**11 Toxicological information**· **Acute toxicity**· **LD/LC50 values that are relevant for classification:****56-81-5 glycerol**

Oral	LD50	4090 mg/kg (mouse)
		12600 mg/kg (rat)

**107-21-1 ethanediol**

Oral	LD50	5840 mg/kg (rat)
Dermal	LD50	9530 mg/kg (rabbit)

**99-76-3 methyl 4-hydroxybenzoate**

Oral	LD50	6000 mg/kg (rabbit)
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**9002-93-1 polyethylene glycol octylphenol ether**

Oral	LD50	500 mg/kg (rat)
Dermal	LD50	8000 mg/kg (rabbit)

· **Primary irritant effect**

- **on the skin:** Irritating effect possible.
- **on the eye:** Irritating effect possible.
- **Sensitization:** Sensitization possible.

· **Additional toxicological information:**

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

USA

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**12 Ecological information**· **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

**13 Disposal considerations**· **Product**· **Recommendation:** Smaller quantities can be disposed of with household waste.· **Uncleaned packagings**· **Recommendation:** Disposal must be made according to official regulations.**14 Transport information**· **DOT regulations**· **Hazard class:** -· **Identification number:** -· **Packing group:** -· **Hazardous substance:** -· **Poison inhalation hazard:** -· **Proper shipping name (technical name):** -· **Label:** -· **Land transport ADR/RID (cross-border)**· **ADR/RID class:** -· **Danger code (Kemler):** -· **UN-Number:** -· **Label:** -· **Description of goods:** -· **Maritime transport IMDG**· **IMDG Class:** -· **UN Number:** -· **Label:** -· **Packaging group:** -· **EMS Number:** -· **Marine pollutant:** No· **Proper shipping name:** -· **Air transport ICAO-TI and IATA-DGR:**· **ICAO/IATA Class:** -· **UN/ID Number:** -· **Label:** -· **Packaging group:** -· **Proper shipping name:** -**15 Regulations**· **Sara**· **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

· **Section 313 (Specific toxic chemical listings):**

107-21-1 | ethanediol

· **TSCA (Toxic Substances Control Act):**

7732-18-5 | water, distilled, conductivity or of similar purity

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56-81-5	glycerol
107-21-1	ethanediol
54060-92-3	2-[[[(4-methoxyphenyl)methylhydrazono]methyl]-1,3,3-trimethyl-3H-indolium methyl sulphate
99-76-3	methyl 4-hydroxybenzoate
9002-93-1	polyethylene glycol octylphenol ether

· **Proposition 65**· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenicity categories**· **EPA (Environmental Protection Agency):**

None of the ingredients is listed.

· **IARC (International Agency for Research on Cancer):**

None of the ingredients is listed.

· **NTP (National Toxicology Program):**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH):**

107-21-1 | ethanediol

A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health):**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients is listed.

· **Product related hazard informations:**

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations according to directives on hazardous materials.

· **National regulations**· **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.**16 Other information**

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The contents and format of this MSDS/SDS are in accordance with 29 CFR 1910.1200(g).

**DISCLAIMER OF LIABILITY :**

The information in this MSDS/SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS/SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS/SDS information may not be applicable

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End of document

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## 1 Identification of substance

- **Product details**

- **Trade name:** Ink for water color pen
- **Application of the substance / the preparation:** Drawing

- **Manufacturer/Supplier:**

WENZHOU KAIWEN STATIONERY & SPORTS MANUFACTURING CO., LTD.  
135, Simingshan Road, Economy & Development Zone, Wenzhou, China  
Tel: 0577-86558715  
Fax: 0577-86531543

- **Information department:** WENZHOU KAIWEN STATIONERY & SPORTS MANUFACTURING CO., LTD.

- **Emergency information:**

Shirley Zhou  
MP: 13676763495

- **Email:** Shirleyzhou1983@gmail.com

- **Reference Number:** SHT002815128; SH9001527/CHEM

## 2 Composition/Data on components

- **Chemical characterization**

- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

107-21-1	ethanediol	16.0%
54060-92-3	2-[[[(4-methoxyphenyl)methylhydrazono]methyl]-1,3,3-trimethyl-3H-indolium methyl sulphate	2.1%

- **Non dangerous components:**

7732-18-5	water, distilled, conductivity or of similar purity	74.56%
55840-82-9	C.I. Basic Blue 3	3.2%
56-81-5	glycerol	2.4%
12217-48-0	3H-Indolium, 2-(2-(4-((2-cyanoethyl)methylamino)phenyl)ethenyl)-1,3,3-trimethyl-, chloride	1.6%
99-76-3	methyl 4-hydroxybenzoate	0.1%
9002-93-1	polyethylene glycol octylphenol ether	0.04%

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**Trade name: Ink for water color pen**

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**Remark:***ethanediol (CAS No. 107-21-1)**Synonym: glycol**2-[[4-methoxyphenyl)methylhydrazono]methyl]-1,3,3-trimethyl-3H-indolium methyl sulphate (CAS No. 54060-92-3)**Synonym: cation orange**C.I. Basic Blue 3 (CAS No. 55840-82-9)**Synonym: cation jade green**3H-Indolium, 2-(2-(4-((2-cyanoethyl)methylamino)phenyl)ethenyl)-1,3,3-trimethyl-, chloride (CAS No. 12217-48-0)**Synonym: cation bright red**methyl 4-hydroxybenzoate (CAS No. 99-76-3)**Synonym: nipagin**polyethylene glycol octylphenol ether (CAS No. 9002-93-1)**Synonym: TX-10**glycerol (CAS No. 56-81-5)**Synonym: glycerin***3 Hazards identification****Hazard description:** Not applicable.**Information pertaining to particular dangers for man and environment:***The product does not have to be labelled due to the calculation procedure of international guidelines.***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)**

Health = 0

Fire = 1

Reactivity = 0

**HMIS-ratings (scale 0 - 4)**

Health = 0

Fire = 1

Reactivity = 0

**4 First aid measures**

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.

**5 Fire fighting measures**

- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Protective equipment:** Wear fully protective suit.

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**Trade name: Ink for water color pen**

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## 6 Accidental release measures

- **Person-related safety precautions:**  
Wear protective equipment. Keep unprotected persons away.  
Ensure adequate ventilation.  
Keep away from ignition sources.
- **Measures for environmental protection:** Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Additional information:** No dangerous substances are released.

## 7 Handling and storage

- **Handling:**
- **Information for safe handling:**  
Ensure good ventilation/exhaustion at the workplace.  
Keep away from heat and direct sunlight.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Store in a cool location.  
Store only in unopened original receptacles.
- **Information about storage in one common storage facility:**  
Store away from foodstuffs.  
Store away from reducing agents.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.

## 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:**

### 107-21-1 ethanediol (16.0%)

TLV (USA)	Short-term value: C 100 mg/m <sup>3</sup> H
IOELV (EU)	Short-term value: 104 mg/m <sup>3</sup> , 40 ppm Long-term value: 52 mg/m <sup>3</sup> , 20 ppm Skin
WEL (Great Britain)	Short-term value: 104** mg/m <sup>3</sup> , 40** ppm Long-term value: 10* 52** mg/m <sup>3</sup> , 20** ppm Sk *particulate **vapour

### 56-81-5 glycerol (2.4%)

PEL (USA)	15* 5** mg/m <sup>3</sup> *total dust **respirable fraction
TLV (USA)	10 ppm
WEL (Great Britain)	10 mg/m <sup>3</sup>

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Personal protective equipment**
- **General protective and hygienic measures:**  
The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Suitable respiratory protective device recommended.
- **Protection of hands:**  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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**Trade name: Ink for water color pen**

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· **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 can not be calculated in advance and has therefore to be checked prior to the application.

· **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:** Goggles recommended during refilling.

## 9 Physical and chemical properties

· **General Information**

<b>Form:</b>	Liquid
<b>Color:</b>	Black
<b>Odor:</b>	Odorless

· **Change in condition**

**Melting point/Melting range:** Not available.

**Boiling point/Boiling range:** Not available.

· **Flash point:** Not available.

· **Flammability (solid, gaseous):** Not available.

· **Ignition temperature:** Not available.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

**Lower:** Not available.

**Upper:** Not available.

· **Oxidizing properties:** Not available.

· **Vapor pressure:** Not available.

· **Density:** Not available.

· **Relative density** Not available.

· **Vapour density** Not available.

· **Evaporation rate** Not available.

· **Solubility in / Miscibility with**

**Water:** Not available.

· **pH-value:** Not available.

· **Viscosity:**

**Dynamic:** Not available.

## 10 Stability and reactivity

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

· **Dangerous reactions:** No dangerous reactions known.

· **Dangerous products of decomposition:** No dangerous decomposition products known.

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**11 Toxicological information**· **Acute toxicity**· **LD/LC50 values that are relevant for classification:****107-21-1 ethanediol**

Oral	LD50	5840 mg/kg (rat)
Dermal	LD50	9530 mg/kg (rabbit)

**56-81-5 glycerol**

Oral	LD50	4090 mg/kg (mouse)
		12600 mg/kg (rat)

**99-76-3 methyl 4-hydroxybenzoate**

Oral	LD50	6000 mg/kg (rabbit)
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**9002-93-1 polyethylene glycol octylphenol ether**

Oral	LD50	500 mg/kg (rat)
Dermal	LD50	8000 mg/kg (rabbit)

· **Primary irritant effect**· **on the skin:** Irritating effect possible.· **on the eye:** Irritating effect possible.· **Sensitization:** Sensitization possible.· **Additional toxicological information:**

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

**12 Ecological information**· **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

**13 Disposal considerations**· **Product**

· **Recommendation:** Smaller quantities can be disposed of with household waste.

· **Uncleaned packagings**

· **Recommendation:** Disposal must be made according to official regulations.

**14 Transport information**· **DOT regulations**

· **Hazard class:** -

· **Identification number:** -

· **Packing group:** -

· **Hazardous substance:** -

· **Poison inhalation hazard:** -

· **Proper shipping name (technical name):** -

· **Label:** -

· **Land transport ADR/RID (cross-border)**

· **ADR/RID class:** -

· **Danger code (Kemler):** -

· **UN-Number:** -

· **Label:** -

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- |  |    |
|--|----|
| · <b>Description of goods:</b>               | -  |
| · <b>Maritime transport IMDG</b>             |    |
| · <b>IMDG Class:</b>                         | -  |
| · <b>UN Number:</b>                          | -  |
| · <b>Label:</b>                              | -  |
| · <b>Packaging group:</b>                    | -  |
| · <b>EMS Number:</b>                         | -  |
| · <b>Marine pollutant:</b>                   | No |
| · <b>Proper shipping name:</b>               | -  |
| · <b>Air transport ICAO-TI and IATA-DGR:</b> |    |
| · <b>ICAO/IATA Class:</b>                    | -  |
| · <b>UN/ID Number:</b>                       | -  |
| · <b>Label:</b>                              | -  |
| · <b>Packaging group:</b>                    | -  |
| · <b>Proper shipping name:</b>               | -  |

## 15 Regulations

### · Sara

#### · Section 355 (extremely hazardous substances):

None of the ingredient is listed.

#### · Section 313 (Specific toxic chemical listings):

107-21-1 | ethanediol

#### · TSCA (Toxic Substances Control Act):

7732-18-5 | water, distilled, conductivity or of similar purity

107-21-1 | ethanediol

56-81-5 | glycerol

54060-92-3 | 2-[[[(4-methoxyphenyl)methylhydrazono]methyl]-1,3,3-trimethyl-3H-indolium methyl sulphate

99-76-3 | methyl 4-hydroxybenzoate

9002-93-1 | polyethylene glycol octylphenol ether

### · Proposition 65

#### · Chemicals known to cause cancer:

None of the ingredients is listed.

#### · Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

#### · Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

#### · Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

### · Cancerogenity categories

#### · EPA (Environmental Protection Agency):

None of the ingredients is listed.

#### · IARC (International Agency for Research on Cancer):

None of the ingredients is listed.

#### · NTP (National Toxicology Program):

None of the ingredients is listed.

#### · TLV (Threshold Limit Value established by ACGIH):

107-21-1 | ethanediol

A4

#### · NIOSH-Ca (National Institute for Occupational Safety and Health):

None of the ingredients is listed.

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**Trade name: Ink for water color pen**

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**· OSHA-Ca (Occupational Safety & Health Administration):**

*None of the ingredients is listed.*

**· Product related hazard informations:**

*Observe the general safety regulations when handling chemicals.*

*The product is not subject to identification regulations according to directives on hazardous materials.*

**· National regulations**

**· Water hazard class:** *Water hazard class 1 (Self-assessment): slightly hazardous for water.*

## 16 Other information

. \*\*\*\*\*

*The contents and format of this MSDS/SDS are in accordance with 29 CFR 1910.1200(g).*

**DISCLAIMER OF LIABILITY :**

*The information in this MSDS/SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS/SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS/SDS information may not be applicable*

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*End of document*

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## 1 Identification of substance

- **Product details**
- **Trade name:** *Ink for water color pen*
- **Application of the substance / the preparation:** *Drawing*
- **Manufacturer/Supplier:**  
WENZHOU KAIWEN STATIONERY & SPORTS MANUFACTURING CO., LTD.  
135, Simingshan Road, Economy & Development Zone, Wenzhou, China  
Tel: 0577-86558715  
Fax: 0577-86531543
- **Information department:** WENZHOU KAIWEN STATIONERY & SPORTS MANUFACTURING CO., LTD.
- **Emergency information:**  
Shirley Zhou  
MP: 13676763495
- **Email:** *Shirleyzhou1983@gmail.com*
- **Reference Number:** *SHT002815128; SH9003946/CHEM*

## 2 Composition/Data on components

- **Chemical characterization**
- **Description:** *Mixture of the substances listed below with nonhazardous additions.*

- **Dangerous components:**

107-21-1	ethanediol	6.0%
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- **Non dangerous components:**

7732-18-5	water, distilled, conductivity or of similar purity	86.66%
56-81-5	glycerol	4.0%
28983-56-4	Methyl Blue	2.6%
64-19-7	acetic acid	0.6%
99-76-3	methyl 4-hydroxybenzoate	0.1%
9002-93-1	polyethylene glycol octylphenol ether	0.04%

- **Remark:**

ethanediol (CAS No. 107-21-1)

Synonym: glycol

glycerol (CAS No. 56-81-5)

Synonym: glycerin

methyl blue (CAS No. 28983-56-4)

Synonym: acid ink blue

methyl 4-hydroxybenzoate (CAS No. 99-76-3)

Synonym: nipagin

polyethylene glycol octylphenol ether (CAS No. 9002-93-1)

Synonym: TX-10

## 3 Hazards identification

- **Hazard description:** *Not applicable.*
- **Information pertaining to particular dangers for man and environment:**  
*The product does not have to be labelled due to the calculation procedure of international guidelines.*
- **Classification system:**  
*The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.*

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· **NFPA ratings (scale 0 - 4)**

Health = 0  
 Fire = 1  
 Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 0  
 Fire = 1  
 Reactivity = 0

**4 First aid measures**

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.

**5 Fire fighting measures**

- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Protective equipment:** Wear fully protective suit.

**6 Accidental release measures**

- **Person-related safety precautions:**  
 Wear protective equipment. Keep unprotected persons away.  
 Ensure adequate ventilation.  
 Keep away from ignition sources.
- **Measures for environmental protection:** Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**  
 Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Additional information:** No dangerous substances are released.

**7 Handling and storage**

- **Handling:**
- **Information for safe handling:**  
 Ensure good ventilation/exhaustion at the workplace.  
 Keep away from heat and direct sunlight.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
 Store in a cool location.  
 Store only in unopened original receptacles.
- **Information about storage in one common storage facility:**  
 Store away from foodstuffs.  
 Store away from reducing agents.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.

**8 Exposure controls and personal protection**

- **Additional information about design of technical systems:** No further data; see item 7.

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## · Components with limit values that require monitoring at the workplace:

**107-21-1 ethanediol (6.0%)**

TLV (USA)	Short-term value: C 100 mg/m <sup>3</sup> H
IOELV (EU)	Short-term value: 104 mg/m <sup>3</sup> , 40 ppm Long-term value: 52 mg/m <sup>3</sup> , 20 ppm Skin
WEL (Great Britain)	Short-term value: 104** mg/m <sup>3</sup> , 40** ppm Long-term value: 10* 52** mg/m <sup>3</sup> , 20** ppm Sk *particulate **vapour

**56-81-5 glycerol (4.0%)**

PEL (USA)	15* 5** mg/m <sup>3</sup> *total dust **respirable fraction
TLV (USA)	10 ppm
WEL (Great Britain)	10 mg/m <sup>3</sup>

· **Additional information:** The lists that were valid during the creation were used as basis.· **Personal protective equipment**· **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

· **Breathing equipment:** Suitable respiratory protective device recommended.· **Protection of hands:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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 can not be calculated in advance and has therefore to be checked prior to the application.

· **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:** Goggles recommended during refilling.**9 Physical and chemical properties**· **General Information**

<b>Form:</b>	Liquid
<b>Color:</b>	Navy blue
<b>Odor:</b>	Odorless

· **Change in condition****Melting point/Melting range:** Not available.**Boiling point/Boiling range:** Not available.· **Flash point:** Not available.· **Flammability (solid, gaseous):** Not available.· **Ignition temperature:** Not available.· **Auto igniting:** Product is not selfigniting.· **Danger of explosion:** Product does not present an explosion hazard.· **Explosion limits:****Lower:** Not available.**Upper:** Not available.

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· <b>Oxidizing properties:</b>	Not available.
· <b>Vapor pressure:</b>	Not available.
· <b>Density:</b>	Not available.
· <b>Relative density</b>	Not available.
· <b>Vapour density</b>	Not available.
· <b>Evaporation rate</b>	Not available.
· <b>Solubility in / Miscibility with Water:</b>	Not available.
· <b>pH-value:</b>	Not available.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not available.

**10 Stability and reactivity**

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions:** No dangerous reactions known.
- **Dangerous products of decomposition:** No dangerous decomposition products known.

**11 Toxicological information**· **Acute toxicity**· **LD/LC50 values that are relevant for classification:****64-19-7 acetic acid**

Oral	LD50	3310 mg/kg (rat)
Dermal	LD50	1060 mg/kg (rabbit)

**56-81-5 glycerol**

Oral	LD50	4090 mg/kg (mouse)
		12600 mg/kg (rat)

**107-21-1 ethanediol**

Oral	LD50	5840 mg/kg (rat)
Dermal	LD50	9530 mg/kg (rabbit)

**99-76-3 methyl 4-hydroxybenzoate**

Oral	LD50	6000 mg/kg (rabbit)
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**9002-93-1 polyethylene glycol octylphenol ether**

Oral	LD50	500 mg/kg (rat)
Dermal	LD50	8000 mg/kg (rabbit)

· **Primary irritant effect**

- **on the skin:** Irritating effect possible.
- **on the eye:** Irritating effect possible.
- **Sensitization:** Sensitization possible.

· **Additional toxicological information:**

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

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**12 Ecological information**· **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

**13 Disposal considerations**· **Product**· **Recommendation:** Smaller quantities can be disposed of with household waste.· **Uncleaned packagings**· **Recommendation:** Disposal must be made according to official regulations.**14 Transport information**· **DOT regulations**· **Hazard class:** -· **Identification number:** -· **Packing group:** -· **Hazardous substance:** -· **Poison inhalation hazard:** -· **Proper shipping name (technical name):** -· **Label:** -· **Land transport ADR/RID (cross-border)**· **ADR/RID class:** -· **Danger code (Kemler):** -· **UN-Number:** -· **Label:** -· **Description of goods:** -· **Maritime transport IMDG**· **IMDG Class:** -· **UN Number:** -· **Label:** -· **Packaging group:** -· **EMS Number:** -· **Marine pollutant:** No· **Proper shipping name:** -· **Air transport ICAO-TI and IATA-DGR:**· **ICAO/IATA Class:** -· **UN/ID Number:** -· **Label:** -· **Packaging group:** -· **Proper shipping name:** -**15 Regulations**· **Sara**· **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

· **Section 313 (Specific toxic chemical listings):**

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· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

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· **Proposition 65**· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Cancerogenity categories**· **EPA (Environmental Protection Agency):**

None of the ingredients is listed.

· **IARC (International Agency for Research on Cancer):**

None of the ingredients is listed.

· **NTP (National Toxicology Program):**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH):**

107-21-1 | ethanediol

A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health):**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients is listed.

· **Product related hazard informations:**

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations according to directives on hazardous materials.

· **National regulations**· **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.**16 Other information**

\*\*\*\*\*  
 The contents and format of this MSDS/SDS are in accordance with 29 CFR 1910.1200(g).

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