

Safety Data Sheet (MSDS)

Issued Date : August 16,2009

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SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name : Artline 200 , 210 , 220 all colours
 EK-200 ,EK-200CC ,EK-210 ,EK-220
 (black,blue,red,green,brown,orange,purple,yellow,pink,magenta,apricot,light blue,
 royal blue, sky blue,turquoise,yellow green,dark green,dark red,dark brown,grey)

Company Name : Shachihata Inc.
Address : 4-69,Amazuka-cho,Nishi-ku,Nagoya City,451-0021,Japan
Telephone : + 81- 52- 521- 3600
Fax : + 81- 52- 521- 3899
Emergency Call : + 81- 52- 521- 3600 (Shachihata Inc. [Japan])
Recommended use : Writing ink

SECTION 2 HAZARDS IDENTIFICATION

GHS Classification

Physical Hazards : Not classified
Health Hazards : Not classified
Environmental Hazards : Classification not possible

LABEL ELEMENTS

Symbols : none
Signal word : none
Hazard statement : none

Precautionary statement

【Prevention】
 Wash hands thoroughly after handling. (P264)

【Response】
 IF INHALED : Remove victim to fresh air and keep at rest in a position comfortable for breathing. (P304+P340)
 IF IN EYES : Rinse cautiously with water for several minutes. (P305+P351+P338)
 Remove contact lenses, if present and easy to do. Continue rinsing.
 If eye irritation persists : Get medical advice/attention. (P337+P313)
 IF SWALLOWED : Get medical advice/attention if you feel unwell.Rinse mouth. (P301+P314+P330)

【Storage】
 Store in a well-ventilated place. Keep container tightly closed. (P403+P233)

【Disposal】
 Dispose of contents/container to waste in accordance with (P501)
 local/regional/ national/international regulation (to be specified).



SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture : Mixture

Ingredients :

black

| Chemical Name / Generic name | Composition weight % | CAS Registry No. | Hazard Class (category) | Hazard statement |
|---------------------------------|-------------------------|---------------------|----------------------------|------------------|
| Water | 60~70 | 7732-18-5 | none | none |
| ethane-1,2-diol | 5~15 | 107-21-1 | Acute Tox.(oral) 4 | H302 |
| 2,2'-oxydiethanol | 5~15 | 111-46-6 | Acute Tox.(oral) 4 | H302 |
| Dyestuff | 5~15 | Confidential | none | none |
| Others | 1~10 | Confidential | none | none |
| total | 100 | | | |

Other colours

| Chemical Name / Generic name | Composition weight % | CAS Registry No. | Hazard Class (category) | Hazard statement |
|---------------------------------|-------------------------|---------------------|----------------------------|------------------|
| Water | 60~70 | 7732-18-5 | none | none |
| ethane-1,2-diol | 10~20 | 107-21-1 | Acute Tox.(oral) 4 | H302 |
| 2,2'-oxydiethanol | 5~15 | 111-46-6 | Acute Tox.(oral) 4 | H302 |
| Dyestuff | 1~10 | Confidential | none | none |
| Others | 1~10 | Confidential | none | none |
| total | 100 | | | |

SECTION 4 FIRST-AID MEASURES

- IF INHALED** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Consult a doctor if symptoms persist.
- IF ON SKIN** : Remove/Take off immediately all contaminated clothing.Wash with soap and water. If skin irritation/rash occurs or feel unwell, consult a doctor for medical advice.
- IF IN EYES** : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.Continue rinsing.If eye irritation persists, get medical advice/attention.
- IF SWALLOWED** : After rinse mouth immediately, give about 250 ml of water or milk and thin in the stomach, and do not vomit forcibly.Moreover, do not give anything from the mouth to the patient when not conscious.Receive the doctor's treatment (stomach pump) promptly.

SECTION 5 FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA : Dry chemical powder, foam or carbon dioxide

UNSUITABLE EXTINGUISHING MEDIA : Water jet

SPECIFIC EXTINCTION METHOD

For initial stage extinction, carbon dioxide or dry chemical powder.

When a fire extends, fire is extinguished by a large amount of water spray.

Do not discharge extinguishing waters into the aquatic environment.

SPECIAL PROTECTIVE FOR FIRE- FIGHTERS

In the extinction work, an appropriate protective equipment (gloves, glasses, and mask) has to be worn.

Because during a fire, hazardous gases may be generated, fire-fighters have to wear self-contained breathing apparatus and other protective equipment.

SECTION 6 ACCIDENTAL RELEASE MEASURES**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES**

Evacuate personnel to safe area. Shut off all sources of ignition.

No Flares, smoking or flame in area. Put on protective equipment. Ensure adequate ventilation.

ENVIRONMENTAL PRECAUTIONS

Do not throw the leakage thing directly into environment.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

In case of a small spill, absorb with dry sand, soil, sawdust, cloth, etc., then place in a chemical waste containers.

In case of large spills, dike and prevent overflow, cover spills with foam, then place in a chemical container using non-sparking tools.

SECONDARY ACCIDENT PREVENTION MEASURE

All ignition sources should be quickly removed. (No smoking in vicinity, prohibit sparks or fire sources)

SECTION 7 HANDLING AND STORAGE

- Handling** : Use with adequate ventilation.
 Avoid contact with skin, eyes and clothing.
 Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Do not eat, drink or smoke when using this product.
- Storage** : Keep containers tightly closed and store in a cool and dry place.
 Keep away from heat and flame, ignition source and sunlight.
 Keep out of the reach of children.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION**OCCUPATIONAL EXPOSURE LIMIT**

| | | | |
|--|--------------|--|--------------------------|
| ACGIH (2012) | | | |
| ethane-1,2-diol | STEL ceiling | | 100mg/m ³ (H) |
| OSHA PEL | Not listed | | |
| DIRECTIVE 2000/39/EC | | | |
| ethane-1,2-diol | TWA | | 20ppm |
| | STEL | | 40ppm |
| Japan Society for Occupational Health (2011) | Not listed | | |

PERSONAL PROTECTION

- : Respiratory Protection
 Not required, but wear mask to prevent organic gas, if necessary.
- : Hand Protection
 Not required, but wear safety gloves, if necessary.
- : Eye Protection
 Not required, but wear safety glasses, if necessary.
- : Skin Protection
 Not required, but wear personal protection apron, boots, if necessary.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

| | |
|-----------------------------------|----------------------------------|
| Appearance | : liquid |
| Odour | : odorless |
| pH | : 7 - 9 |
| Boiling point | : No data available |
| Flash point | : Not applicable (closed cup) |
| Relative Density (at 25°C) | : 1.0 - 1.2 (g/cm ³) |
| Solubility in Water | : soluble |

SECTION 10 STABILITY AND REACTIVITY

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|---|---|
| Stability | : Stable under normal handling. |
| Conditions to Avoid | : High temperature, Direct sunlight, Fire |
| Incompatible Materials | : Strong oxidising agents |
| Hazardous Decomposition Products | : CO, CO ₂ |

SECTION 11 TOXICOLOGICAL INFORMATION

| | |
|------------------------|--|
| Acute toxicity | : LD/LC50 values that are relevant for classification [ethane-1,2-diol] and [2,2'-oxydiethanol] |
| | Oral-rat LD50 >300 - <=2,000mg/kg |
| | Dermal-rabbit LD50 >5,000 mg/kg |
| Carcinogenicity | : Not listed by IARC, EPA, EU, NTP. |

SECTION 12 ECOLOGICAL INFORMATION

| | |
|---|-------------------------------|
| Hazardous to the aquatic environment (acute) | : Classification not possible |
|---|-------------------------------|

Hazardous to the aquatic environment (chronic) : Classification not possible

Hazardous to the ozone layer : Classification not possible

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal must be made according to official regulations.

Comply with all Federal, State, and Local regulations regarding disposal.

Do not allow product to reach ground, any water course or sewage system.

SECTION 14 TRANSPORT INFORMATION

| | | |
|--------------------------------|------------------------|--------|
| UN number | (DOT, ADR, IMDG, IATA) | : none |
| UN proper shipping name | (DOT, ADR, IMDG, IATA) | : none |
| UN Classification | | : none |
| Packing group | (DOT, ADR, IMDG, IATA) | : none |
| Marine pollutant (Y/N) | | : N |
| EmS number | | : none |

SECTION 15 REGULATORY INFORMATION

< EU Information >

Regulation (EC) No 1272/2008 (CLP)

| | |
|-------------------------|-------------------------------------|
| Substance name | : [ethane-1,2-diol] |
| Hazard Class & Category | : Acute toxicity - Oral, Category 4 |
| Symbols | : GHS07 |
| Signal word | : Warning |
| Hazard statements | : H302 Harmful if swallowed |

| | |
|-------------------------|-------------------------------------|
| Substance name | : [2,2'-oxydiethanol] |
| Hazard Class & Category | : Acute toxicity - Oral, Category 4 |
| Symbols | : GHS07 |
| Signal word | : Warning |
| Hazard statements | : H302 Harmful if swallowed |

Directive 67/548/EEC or 1999/45/EC

| | |
|--|---|
| Substance name | : [ethane-1,2-diol] |
| Classification | : Xn; R22 |
| R-Phrase | : R22 Harmful if swallowed. |
| S-Phrase | : S2 Keep out of the reach of children. |
| Symbols and indications of danger specific | Xn : Harmful |

| | |
|--|---|
| Substance name | : [2,2'-oxydiethanol] |
| Classification | : Xn; R22 |
| R-Phrase | : R22 Harmful if swallowed. |
| S-Phrase | : S2 Keep out of the reach of children. |
| | S46 If swallowed, seek medical advice immediately and show this container or label. |
| Symbols and indications of danger specific | Xn : Harmful |

< USA Information >

OSHA STATUS : This product is not hazardous under 29 CFR 1910.1200.

TSCA STATUS : All components on TSCA INVENTORY.

TSCA Hazard Communication Program (40 CFR Part 721) (SNUR) : not Listed

CERCLA REPORTABLE QUANTITY (40 CFR 117,302) : RQ 5000 pounds [ethane-1,2-diol]

SARA TITLE III Section 313 (40 CFR 372) : Listed [ethane-1,2-diol]

California Proposition 65 (Chemicals known to cause cancer) : not Listed

Refer to any other federal , state , EU , national and local regulations.

SECTION 16 OTHER INFORMATION



EU RoHS Directive(2002/95/EC) and ELV Directive(2000/53/EC)
This product not contain lead,mercury, cadmium, hexavalent chromium,
polybromiated biphenyls (PBB) or polybrominated diphenylethers (PBDE).

This data sheet may not be enough when evaluating danger or hazard.The above information, which is created from currently available documents, information and data, may be revised when new findings announced.This document has been written on the assumption that when dealing with a large amount of ink on the business case and emergency.When handling as a normal product, please refer to the notes that is described in the produce or packaging.The information contained herein is not intended to provide any kind of warranty other than information, there is no guarantee for the accuracy of the content.