

Safety Data Sheet

according to Regulation (EC) No 453/2010

Revision Date : 26.05.2015

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name : Artline DRAWING SYSTEM Color : (Black)
 EK-2305 , EK-231 , EK-232 , EK-233 , EK-234 , EK-235 , EK-236 , EK-237 , EK-238

1.2. Relevant identified uses of the substance or mixture

and uses advised against

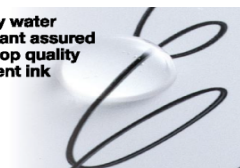
Recommended use : Writing ink



1.3. Details of the supplier of the safety data sheet

Supplier Company Name : Shachihata (Europe) Limited
 Address : Unit 8, Ashville Way, Sutton Weaver,
 Runcorn, Cheshire, WA7 3EZ, England
 Telephone : 0870 600 5 006
 Fax : 0871 200 5 006
 Contact (e-mail) : www.artline-xstamper.com

Highly water
 resistant assured
 with top quality
 pigment ink



Manufacturer 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
 Contact (e-mail) : chem-analysis@ngy.shachihata.co.jp



1.4. Emergency telephone number

Telephone: 0870 600 5 006

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.1. Classification (REGULATION (EC) No 1272/2008)

Not classified

2.2. Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms : none

Signal word : none

Hazard statement : none

Precautionary statement

【Prevention】

Wash hands thoroughly after handling. (P264)

【Response】

IF SWALLOWED : Get medical advice/attention if you feel unwell.Rinse mouth. (P301+P314+P330)

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.
 Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)

If eye irritation persists : Get medical advice/attention. (P337+P313)

【Storage】

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

【Disposal】

Dispose of contents/container to local waste disposal company. (P501)

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Ingredients :

| Chemical Name / Generic name | Composition weight % | CAS-No. EC-No. Index | Classification (REGULATION (EC) No 1272/2008) | |
|---------------------------------|-------------------------|----------------------------|--|------------------|
| | | | Hazard Class | Hazard statement |
| Water | 50 ~ 60 | 7732-18-5 231-791-2 | none | none |
| ethane-1,2-diol | 10 ~ 20 | 107-21-1 203-473-3 | Acute Tox.(oral) 4 | H302 |
| 2,2'-oxydiethanol | 1 ~ 10 | 111-46-6 203-872-2 | Acute Tox.(oral) 4 | H302 |
| Carbon black | 5 ~ 15 | 1333-86-4 215-609-9 | none | none |

SECTION 4: First aid measures

4.1. Description of 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: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Dry chemical powder, foam or carbon dioxide
Unsuitable extinguishing media : none

5.2. Special hazards arising from the substance or mixture

- 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.

5.3. Advice for firefighters

- 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

6.1. 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.

6.2. Environmental precautions

- Do not throw the leakage thing directly into environment

6.3. Methods and material for containment and cleaning up

- In case of a small spill, remove by absorbing with absorbents (sawdust, soil, sand, waste cloth,etc.),
and then wipe off the waste well with waste cloth, and rag.
In case of large spills, prevent leakage by enclosing with nonflammables (earth and sand, etc.)
and collect into empty container by scoop, suction equipment or the like.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Advice on safe 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.

7.2. Conditions for safe storage, including any incompatibilities

- Requirements for storage : Keep containers tightly closed and store in a cool and dry place.
 areas and containers : Keep away from heat and flame, ignition source and sunlight.
 Keep out of the reach of children.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DIRECTIVE 2000/39/EC

| | | |
|-----------------|-----|-------|
| ethane-1,2-diol | TWA | 20ppm |
|-----------------|-----|-------|

EH40/2005 Workplace exposure limits

| | | |
|-------------------|-----|-----------------------|
| ethane-1,2-diol | TWA | 20ppm |
| 2,2'-oxydiethanol | TWA | 23ppm |
| Carbon black | TWA | 3.5 mg/m ³ |

ACGIH (2013)

| | | |
|-----------------|--------------|--------------------------|
| ethane-1,2-diol | STEL ceiling | 100mg/m ³ (H) |
| Carbon black | TWA | 3 mg/m ³ |

OSHA PEL

| | | |
|--------------|-----|-----------------------|
| Carbon black | TWA | 3.5 mg/m ³ |
|--------------|-----|-----------------------|

8.2. Exposure controls

Personal protective equipment

- Respiratory Protection : Avoid breathing vapours. Wear mask to prevent organic gas, if necessary.
 Hand Protection : Avoid contact with hands. Wear safety gloves, if necessary.
 Eye Protection : Avoid contact with eyes. Wear safety glasses, if necessary.
 Skin Protection : Avoid skin contact. Wear personal protection apron, boots, if necessary.

Environmental exposure controls

- General advice : Prevent product from entering drains.
 Prevent further leakage or spillage if safe to do so.
 If the product contaminates rivers and lakes or drains inform respective authorities.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance : black liquid
 Odour : odourless
 pH : 8~11
 Boiling point : No data available
 Flash point : Not applicable (closed cup)
 Relative Density (at 25 °C) : 1.0 ~ 1.3 (g/cm³)
 Solubility in Water : soluble

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Thermally stable at typical use temperatures.

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to Avoid

High temperature, Direct sunlight, Fire

10.5. Incompatible Materials

No data available

10.6. Hazardous decomposition products

CO, CO₂**SECTION 11: Toxicological information**

11.1. Information on toxicological effects

- 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 : Carbon black has been classified by the IARC as Group 2B.
Other materials ; Not contain any component that is considered
a human carcinogen by IARC, ACGIH, EPA, EU or NTP .

Regarding the carcinogenicity of carbon black, International Agency for Research on Cancer (IARC) has classified as a group 2B. However, ACGIH(American Conference of Governmental Industrial Hygienists) ,EPA(Environmental Protection Agency),EU (European Chemicals Agency), NTP (National Toxicology Program, USA) in the classification of suspected carcinogenic to humans has not been done. Therefore, as the ink product we could not classify the carcinogenicity of GHS from that there is no sufficient data.

SECTION 12: Ecological information

- 12.1. Toxicity : No data available
- 12.2. Persistence and degradability : No data available
- 12.3. Bioaccumulative potential : No data available
- 12.4. Mobility in soil : No data available
- 12.5. Results of PBT and vPvB assessment : No data available
- 12.6. Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

- 14.1. UN number DOT, ADR, IMDG, IATA : none
- 14.2. UN proper shipping name DOT, ADR, IMDG, IATA : none
- 14.3. Transport hazard class(es) DOT, ADR, IMDG, IATA :
- | | |
|---------|------|
| · Class | none |
| · Label | none |
- 14.4. Packing group DOT, ADR, IMDG, IATA :
- 14.5. Environmental hazards Marine pollutant : No
- 14.6. Special precautions for user EMS Number : none
- 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

< 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 |

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information



EU RoHS Directive(2002/95/EC) and ELV Directive(2000/53/EC)
This product does not contain lead, mercury, cadmium, hexavalent chromium, polybrominated 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.