(ISO11014:2009)[Shachinata Inc.] (EK-231_black_d) 1/4



\$6 Shachihata

Safety Data Sheet

(MSDS)

Issued Date May 16,2008
Revised Date April 22,2013

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SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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

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 (P304+P340)

for breathing.

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]

Substance/Mixture

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

Mixture

Ingredients Chemical Name CAS Hazard Class Hazard statement Composition Generic name weight % Registry No. (category) Water 50~60 7732-18-5 none none ethane-1,2-diol 10~20 107-21-1 Acute Tox (oral) 4 H302 H302 2,2' oxydiethanol $1 \sim 10$ 111-46-6 Acute Tox.(oral) 4 5~15 1333-86-3 Carbon black none none 1~10 Confidential Synthetic resin none none 5~15 Others Confidential none none

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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/m³(H)
Carbon black TWA 3.5 mg/m³

OSHA PEL Not listed

DIRECTIVE 2000/39/EC

ethane-1,2-diol TWA 20ppm STEL 40ppm

Japan Society for Occupational Health (2011)

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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 : black liquid
Odour : odorless
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

Stability Stable under normal handling.

Conditions to Avoid : High temperature, Direct sunlight, Fire

Incompatible Materials Strong oxidising agents

Hazardous Decomposition Products CO, CO₂

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</th>

 Dermal-rabbit
 LD50
 >5,000 mg/kg

Carcinogenicity : Carbon black has been classified by the IARC as Group 2B.

Other materials: Not listed by IARC, EPA, EU, NTP.

Regarding the carcinogenicity of carbon black, the International Agency for Research on Cancer (IARC) has classified as a group 2B. However, as the ink product we could not classify the carcinogenicity of GHS from that there is no sufficient data.

none

SECTION 12 ECOLOGICAL INFORMATION

Hazardous to the aquatic environment (acute)

Classification not possible
Hazardous to the aquatic environment (chronic)

Classification not possible
Classification not possible
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.

(DOT, ADR, IMDG, IATA)

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

SECTION 14 TRANSPORT INFORMATION

UN number

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

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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) : listed [carbon black]

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.