

Safety Data Sheet (MSDS)

Issued Date : 10 February 2020

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SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name : Artline PAINT MARKER Colour : (Green)
EKS-400



Company Name : Shachihata Inc.

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Recommended use : Paint marker ink



SECTION 2 HAZARDS IDENTIFICATION

GHS Classification

Physical Hazards

Flammable liquids Category 2

Health Hazards

Serious eye damage Category 1

Reproductive toxicity Category 1B

Specific target organ toxicity : single exposure Category 3 (narcotic effects)

Carcinogenicity Classification not possible

Environmental Hazards

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

LABEL ELEMENTS

Symbols



Signal word : Danger

Hazard statement : Highly flammable liquid and vapour
Causes serious eye damage
May damage fertility or the unborn child
May cause drowsiness or dizziness

(H225)

(H318)

(H360)

(H336)

Precautionary statement

【Prevention】

Keep out of reach of children.

Obtain special instructions before use.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Take precautionary measures against static discharge.

Avoid breathing vapours.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

【Response】

In case of fire : Use dry chemical powder, foam or carbon dioxide to extinguish.

(P102)

(P201)

(P210)

(P243)

(P261)

(P271)

(P280)

(P370+P378)

IF INHALED : Remove person to fresh air and keep 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 and attention.

(P337+P313)

IF exposed or concerned : Get medical advice and attention.

(P308+P313)

Immediately call a POISON CENTER or physician.

(P310)

IF ON SKIN (or hair) : Take off immediately all contaminated clothing. Rinse skin with water.

(P303+P361+P353)

If skin irritation occurs : Get medical advice and attention.

(P332+P313)

【Storage】

Store in a well-ventilated place. Keep container tightly closed.

(P403+P233)

【Disposal】

Dispose of contents and container in accordance with local regulations.

(P501)

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Ingredients :

Chemical Name / Generic name	Composition weight %	CAS Registry No.	Hazard Class (category)	Hazard statement
Propan-2-ol	45 ~ 55	67-63-0	Flam. Liq. 2 Eye Irrit. 2A STOT. SE. 3	H225 H319 H336
Propan-1-ol	10 ~ 20	71-23-8	Flam. Liq. 2 Eye Dam. 1 STOT. SE. 3	H225 H318 H336
Benzyl alcohol	1 ~ 5	100-51-6	Acute Tox.(oral) 4 Acute Tox.(inhal.) 4 Eye Irrit. 2A	H302 H332 H319
2-Ethoxyethanol	<0.2	110-80-5	Flam. Liq. 3 Acute Tox.(oral) 4 Acute Tox.(inhal.) 3 Repr. 1B	H226 H302 H331 H360
Synthetic resin	10 ~ 20	Confidential	none	none
Titanium dioxide	5 ~ 15	13463-67-7	none	none
Pigment	1 ~ 10	Confidential	none	none
Additive	1 ~ 5	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, 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.

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 (2020)

Propan-2-ol	TWA	200 ppm
Propan-1-ol	TWA	100 ppm
2-Ethoxyethanol	TWA	5 ppm
Titanium dioxide	TWA	10 mg/m ³

OSHA PEL

Propan-2-ol	TWA	400 ppm
Propan-1-ol	TWA	200 ppm
2-Ethoxyethanol	TWA	200 ppm
Titanium dioxide	TWA	15 mg/m ³

DIRECTIVE 2009/161/EU

2-Ethoxyethanol	TWA	2 ppm
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Japan Society for Occupational Health (2020)

Propan-2-ol	TWA	400 ppm
Benzyl alcohol	TWA	25 mg/m ³
2-Ethoxyethanol	TWA	5 ppm
Titanium dioxide	OEL (total dust)	4 mg/m ³

Dusts Class 2

PERSONAL PROTECTION

- Respiratory Protection : Use with local exhaust ventilation, when in long use.
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.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : Green liquid
- Odour : Minor solvent odour
- pH : Not applicable
- Boiling point : 82 ~ 205 °C
- Flash point : 12 °C (closed cup)
- Relative Density (at 25°C) : 0.9 ~ 1.1 (g/cm³)
- Solubility in Water : Insoluble

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
- | | | | |
|-------------------|------|----------------------|--|
| [Propan-2-ol] | | | |
| Oral-rat | LD50 | >5,000 mg/kg | |
| Dermal-rabbit | LD50 | >5,000 mg/kg | |
| Inhalation-rat | LC50 | >20 mg/L/4h | |
| [Propan-1-ol] | | | |
| Oral-rat | LD50 | >2,000 mg/kg | |
| Dermal-rabbit | LD50 | >2,000 mg/kg | |
| Inhalation-rat | LC50 | >20 mg/L/4h | |
| [Benzyl alcohol] | | | |
| Oral-rat | LD50 | >300 - <=2,000 mg/kg | |
| Inhalation-rat | LC50 | >10 - <=20 mg/L/4h | |
| [2-Ethoxyethanol] | | | |
| Oral-rat | LD50 | >300 - <=2,000 mg/kg | |
| Inhalation-rat | LC50 | >2 - <=10 mg/L/4h | |
- Serious eye damage : Category 1 Causes serious eye damage
- Reproductive toxicity : Category 1B May damage fertility or the unborn child
- Specific target organ toxicity (single exposure) : Category 3 May cause drowsiness or dizziness
- Carcinogenicity : Titanium dioxide 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 titanium dioxide, 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

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) : UN1210

UN proper shipping name (DOT, ADR, IMDG, IATA) : PRINTING INK, flammable

UN Classification : 3

Packing group (DOT, ADR, IMDG, IATA) : II

Marine pollutant (Y/N) : N

EmS number : F-E,S-D

**SECTION 15 REGULATORY INFORMATION**

< EU Information >

Regulation (EC) No 1272/2008 (CLP)

Substance name : [Propan-2-ol]

Hazard Class & Category : Flammable liquids, Category 2

Eye irritation, Category 2

Specific target organ toxicity - single exposure, Category 3

Symbols : GHS02,GHS07

Signal word : Danger

Hazard statements : H225 Highly flammable liquid and vapour

H319 Causes serious eye irritation

H336 May cause drowsiness or dizziness

Substance name : [Propan-1-ol]

Hazard Class & Category : Flammable liquids, Category 2

Serious eye damage, Category 1

Specific target organ toxicity - single exposure, Category 3

Symbols : GHS02,GHS07,GHS05

Signal word : Danger

Hazard statements : H225 Highly flammable liquid and vapour

H318 Causes serious eye damage

H336 May cause drowsiness or dizziness

Substance name : [Benzyl alcohol]

Hazard Class & Category : Acute toxicity (inhalation: vapour), Category 4

Acute toxicity (oral), Category 4

Symbols : GHS07

Signal word : Warning

Hazard statements : H332 Harmful if inhaled

H302 Harmful if swallowed

Substance name : [2-Ethoxyethanol]

Hazard Class & Category : Flammable liquids, Category 3

Acute toxicity (oral), Category 4

Acute toxicity (inhalation: vapour), Category 3

Reproductive toxicity, Category 1B

Symbols : GHS02,GHS06,GHS08

Signal word	:	Danger
Hazard statements	:	H226 Flammable liquid and vapour
		H302 Harmful if swallowed
		H331 Toxic if inhaled
		H360 May damage fertility or the unborn child

< USA Information >

OSHA STATUS : This product is hazardous under 29 CFR 1910.1200.

TSCA Hazard Communication Program (40 CFR Part 721) (SNUR) : Not Applicable

CERCLA REPORTABLE QUANTITY (40 CFR 117,302) : Listed 2-Ethoxyethanol,
Reportable quantity 1,000 pounds

SARA TITLE III Section 313 (40 CFR 372) : Not Applicable

California Proposition 65 : Titanium dioxide
(airborne, unbound particles of respirable size)
2-Ethoxyethanol (developmental, male)

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

SECTION 16 OTHER INFORMATION



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.

EU RoHS	(Directive 2011/65/EU)
EU ELV	(DIRECTIVE 2000/53/EC)