

Safety Data Sheet (MSDS)



IssuedDate :10February2020Revised Date :10December2020

SECTION 1	CHEMICAL PRODUCT AND COMPANY IDENTIFICATION	
Product Name	Artline PAINT MARKER Colour : (Yellow) EKS-400	ENE REE Ker 2.3
Company Name Address Telephone Fax Contact (e-mail) Emergency Call Recommended us		
SECTION 2	HAZARDS IDENTIFICATION	
GHS Classificatio Physical Hazar Flammable lio Health Hazards	ds quids Category 2	
Serious eye o	damage Category 1 et organ toxicity ; single exposure Category 3 (narcotic effects)	
Hazardous to	Hazardsthe aquatic environment (acute)Classification not possiblethe aquatic environment (chronic)Classification not possiblethe ozone layerClassification not possible	
LABEL ELEMENT Symbols	s	
Signal word	: Danger	
Hazard stateme	ent : Highly flammable liquid and vapour Causes serious eye damage May cause drowsiness or dizziness	(H225) (H318) (H336)
Precautionary (Prevention)		
Keep away fr Take precaut Avoid breathi	each of children. om heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. ionary measures against static discharge. ng vapours. doors or in a well-ventilated area.	(P20) (P210) (P243) (P261) (P271)
【Response】 In case of fire	ive gloves/protective clothing/eye protection/face protection. • : Use dry chemical powder, foam or carbon dioxide to extinguish. : Remove person to fresh air and keep comfortable for breathing.	(P280) (P370+P378) (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 and attention.	(P337+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 /	Composition	CAS	Hazard Class	Hazard statement
Generic name	weight %	Registry No.	(category)	
Propan-2-ol	40 ~ 50	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
Synthetic resin	10 ~ 20	Confidential	none	none
Titanium dioxide	10 ~ 20	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.)

- 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
Titanium dioxide		TWA	10 mg/m ³
OSHA PEL			
Propan-2-ol		TWA	400 ppm
Propan-1-ol		TWA	200 ppm
Titanium dioxide		TWA	15 mg/m ³
DIRECTIVE 2000/39	/EC		None
Japan Society for Oc	cupational Heal	th (2020)	
Propan-2-ol		TWA	400 ppm
Benzyl alcohol		TWA	25 mg/m ³
Titanium dioxide	Dusts Class 2	OEL (total dust)	4 mg/m ³

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	: Yellow liquid
Odour	: Minor solvent odour
рН	: Not applicable

[ISO11014:2009] [Shachihata Inc.] [EKS-400_yellow_b] 4/5 **Boiling point** : 82 ~ 205 °C : 12 °C (closed cup) Flash point **Relative Density (at 25°C)** \therefore 0.9 ~ 1.1 (g/cm³) : Insoluble Solubility in Water **SECTION 10** STABILITY AND REACTIVITY Stability : Stable under normal handling. **Conditions to Avoid** : High temperature, Direct sunlight, Fire **Incompatible Materials** : Strong oxidising agents $: CO, CO_2$ **Hazardous Decomposition Products SECTION 11** TOXICOLOGICAL INFORMATION Acute toxicity : LD/LC50 values that are relevant for classification [Propan-2-ol] Oral-rat LD50 >5,000 mg/kg >5,000 mg/kg Dermal-rabbit LD50 Inhalation-rat LC50 >20 mg/L/4h [Propan-1-ol] Oral-rat LD50 >2,000 mg/kg >2,000 mg/kg Dermal-rabbit LD50 LC50 >20 mg/L/4h Inhalation-rat [Benzyl alcohol] Oral-rat LD50 >300 - <=2,000 mg/kg Inhalation-rat LC50 >10 - <=20 mg/L/4h

 Serious eye damage
 : Category 1
 Causes serious eye damage

 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 INFORMAT	ΓΙΟΝ
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)	: 11	3
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	E 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			
< USA Information >	t is hererdeus under 20 CEB 1010 1200			
	t is hazardous under 29 CFR 1910.1200.			
	n Program (40 CFR Part 721) (SNUR) : Not Applicable			
CERCLA REPORTABLE QUANTITY (40 CFR 117,302) : Not Applicable				

SARA TITLE III Section 313 (40 CFR 372)

California Proposition 65

(airborne, unbound particles of respirable size)

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.

: Not Applicable

: Titanium dioxide

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