Avoid release to the environment.

Wear protective gloves and eye protection .



Safety Data Sheet

(MSDS)

Issued Date : 16 May 2008 Revised Date : 12 January 2021

SECTION 1	CHEMICAL PRODUCT AND COMPANY IDENTIFICATION	
Product Name	: Artline 400XF Paint Marker EK-400 XF Artline 440XF Paint Marker EK-440 XF Artline 444XF Paint Marker EK-444 XF	
Company Name Address Telephone Fax Contact (e-mail) Emergency Call Recommended us	 4-69, Amazuka-cho, Nishi-ku, Nagoya City, 451-0021, Japan + 81- 52- 521- 3600 + 81- 52- 521- 3899 <u>chem-analysis@ngy.shachihata.co.jp</u> + 81- 52- 521- 3600 (Shachihata Inc. [Japan]) 	
SECTION 2	HAZARDS IDENTIFICATION	
GHS Classificatio Physical Hazar Flammable lio	ds	
Health Hazards Skin irritation Specific targe Aspiration ha Carcinogenic	Category 2 t organ toxicity ; single exposure Category 3 (narcotic effects) zard Category 1	
Hazardous to	Hazardsthe aquatic environment (acute)Classification not possiblethe aquatic environment (chronic)Category 2the ozone layerClassification not possible	
LABEL ELEMENT Symbols	s () () () () () () () () () ()	
Signal word	: Danger	
Hazard stateme	ent : Highly flammable liquid and vapour Causes skin irritation May cause drowsiness or dizziness May be fatal if swallowed and enters airways Toxic to aquatic life with long lasting effects	(H225) (H315) (H336) (H304) (H411)
Keep away fro Take precaut Avoid breathi Wash hands	each of children. om heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. ionary measures against static discharge.	(P102) (P210) (P243) (P261) (P264) (P271)

(P273)

(P280)



[ISO11014:2009] [Shachihata Inc.] [EK-400_green_n] 2/5

[Response]		
IF SWALLOWED) : Immediately call a POISON CENTER or physician.	(P301+P310)
IF ON SKIN : Wa	ash with plenty of water and soap.	(P302+P352)
IF ON SKIN (or h	nair) : Take off immediately all contaminated clothing. Rinse skin with wate	Г. (P303+P361+P3
IF INHALED : Re	emove person to fresh air and keep comfortable for breathing.	(P304+P340)
Call a POISON C	CENTER or physician if you feel unwell.	(P312)
Do NOT induce v	/omiting.	(P331)
If skin irritation oc	ccurs : Get medical advice and attention.	(P332+P313)
In case of fire : U	lse dry chemical powder, foam or carbon dioxide to extinguish.	(P370+P378)
Collect spillage.		(P391)
[Storage]		
Store in a well-ve	entilated place. Keep container tightly closed.	(P403+P233)
【Disposal】		
Dispose of conter	nts 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)	
			Flam. Liq. 2	H225
			Skin Irrit. 2	H315
Isoparaffinic Hydrocarbon	50 ~ 60	Confidential	STOT. SE. 3	H336
			Asp. Tox. 1	H304
			Aquatic Chronic 2	H411
Synthetic resin	25 ~ 35	Confidential	none	none
Titanium dioxide	5 ~ 15	13463-67-7	none	none
Organic pigment	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, 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)			
Titanium dioxide		TWA	10 mg/m ³
OSHA PEL			
Titanium dioxide		TWA	15 mg/m ³
DIRECTIVE 2000/39	/EC		None
Japan Society for Oc	cupational Healtl	n (2020)	
Titanium dioxide	Dusts Class 2	OEL (total dust)	4 mg/m ³
Material manufacture	er data (reference	e value)	
Isoparaffinic Hydro	ocarbon	RCP-TWA	241 ppm

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
рН	:	Not applicable
Boiling point	:	90 °C
Flash point	:	11 °C (closed cup)
Relative Density (at 25°C)	:	0.8 ~ 1.0 (g/cm ³)
Solubility in Water	:	Insoluble

SECTION 10 STABILIT	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 Pro	Hazardous Decomposition Products : CO, CO ₂				
SECTION 11 TOXICOL	OGICAL INFORMATION				
Acute toxicity	: LD/LC50 values that are relevant for classification [Isoparaffinic Hydrocarbon] Oral-rat LD50 >5,000 mg/kg Dermal-rabbit LD50 >2,000 mg/kg Inhalation-rat LC50 >20 mg/L/4h				
Skin irritation	: Category 2 Causes skin irritation				
Specific target organ toxicity ; single exposure	: Category 3 May cause drowsiness or dizziness				
Aspiration hazard	: Category 1 May be fatal if swallowed and enters airways				
Carcinogenicity	: Titanium dioxide has been classified by the IARC as Group 2B. Other materials ; Not contain any component that is considered				

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.

a human carcinogen by IARC, ACGIH, EPA, EU or NTP.

SECTION 12 ECOLOGICAL INFORMATION

Hazardous to the aquatic environment (acute)	: Classification not possible
Hazardous to the aquatic environment (chronic)	: Category 2 Toxic to aquatic life with long lasting effects
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 TRANS	PORT INFORMATION		
UN number	(DOT, ADR, IMDG, IATA)	: UN1993	
UN proper shipping name	(DOT, ADR, IMDG, IATA)	: FLAMMABLE LIQUID, N.O.S. (Isoparaffinic Hydrocarbon)	
UN Classification		: 3	
Packing group	(DOT, ADR, IMDG, IATA)	: 11	3
Marine pollutant (Y/N)		: N	
EmS number		: F-E, S-E	

SECTION 15 REGULATORY INFORMATION

< EU Information > Regulation (EC) No 1272/2008 (CLP) Hazard Class & Category : None Symbols : None Signal word : None Hazard statements : None

< USA Information >

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

TSCA STATUS : All components on TSCA INVENTORY. TSCA Hazard Communication Program (40 CFR Part 721) (SNUR) CERCLA REPORTABLE QUANTITY (40 CFR 117,302) SARA TITLE III Section 313 (40 CFR 372) California Proposition 65

- : Not Applicable
- : Not Applicable
- : Not Applicable
- : Titanium dioxide

(airborne, unbound particles of respirable size)

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

SECTION 16 OTHER INFORMATION



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

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.