

Safety Data Sheet (MSDS)

Issued Date : 24 December 2008 Revised Date : 16 September 2021

		Revised Date : 16 S	eptember 2021
SECTION 1	CHEMICAL PRODUCT AND	COMPANY IDENTIFICATION	
Product Name	TAT INDELIBLE INK (Special T	Type) M-99N Colour : (Orange)	
	STO-1/M-99N-OR (Small bottle)		(art)
	STO-3/M-99N-OR (Large bottle)	Colour	
Company Name Address Telephone Fax Contact (e-mail) Emergency Call Recommended us	: + 81- 52- 521- 3600 : + 81- 52- 521- 3899 : <u>chem-analysis@ngy.shachiha</u> : + 81- 52- 521- 3600 (Sha	, Nagoya City, 451-0021, Japan ta.co.jp achihata Inc. [Japan])	
SECTION 2	HAZARDS IDENTIFICATION	l	
GHS Classification Physical Hazard Flammable liq Health Hazards	ls	Category 3	THE REAL
Eye irritation Specific targe Carcinogenicit	t organ toxicity ; single exposure ty	Category 2A Category 3 (narcotic effects) Classification not possible	
Hazardous to	Hazards the aquatic environment (acute) the aquatic environment (chronic) the ozone layer	Classification not possible Classification not possible Classification not possible	
LABEL ELEMENTS Symbols		-	
Signal word	: Warning		
Hazard stateme	C C	n	(H226) (H319) (H336)
Precautionary s	statement		
Take action to Wear eye prot Avoid breathi	prevent static discharges. Tection. ng vapours.	flames and other ignition sources. No smoking	(P243) (P280) (P261)
•	oors or in a well-ventilated area. horoughly after handling.		(P271) (P264)

[Response]

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

IF INHALED : Remove person to fresh air and keep comfortable for breathing.



(P370+P378)

(P304+P340)

[ISO11014:2009][Shachihata Inc.] [M-99N_orange_n] 2/5	
Call a POISON CENTER or physician if you feel unwell.	(P312)
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 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)
IF SWALLOWED: Get medical advice if you feel unwell. Rinse mouth.	(P301+P314+P330)
[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
1-Ethoxypropan-2-ol	35 ~ 45	1569-02-4	Flam. Liq. 3 Eye Irrit. 2A STOT. SE. 3	H226 H319 H336
Glycol ether class solvent	25 ~ 35	Confidential	Flam. Liq. 4	H227
Synthetic resin	15 ~ 20	Confidential	none	none
Titanium dioxide	10 ~ 14	13463-67-7	none	none
Dyestuff	0.1 ~ 1	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.

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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

Obtain specia Do not handl Do not eat, d Storage : Keep contain Keep away fr	et with skin, eyes a al instructions before e until all safety p rink or smoke who hers tightly closed	ore use. recautions have been en using this produce and store in a cool e, ignition source a	and dry place.
SECTION 8 EXPO	SURE CONTR	OLS AND PER	SONAL PROTECTION
OCCUPATIONAL EXPOS	URE LIMIT		
ACGIH (2020)			
1-Ethoxypropan-2-ol		TWA	50 ppm (skin)
Titanium dioxide		TWA	10 mg/m^3
OSHA PEL		TXX A	15 (3
Titanium dioxide		TWA	15 mg/m ³
DIRECTIVE 2000/39/EC			Not listed
Japan Society for Occup			3
Titanium dioxide	Dusts Class 2	OEL (total dust)	4 mg/m^3
PERSONAL PROTECTION Respiratory Protection	: Use with local		n, when in long use. nask to prevent organic gas, if necessary.
Hand Protection			safety gloves, if necessary.
Eye Protection	: Avoid contact	with eyes. Wear sa	fety glasses, if necessary.
Skin Protection	: Avoid skin co	ntact. Wear persona	al protection apron, boots, if necessary.
SECTION 9 PHYS	ICAL AND CH	EMICAL PROP	ERTIES
Appearance	: Orange liquid		
Odour	: Minor solvent	odour	
рН	: Not applicable	2	
Boiling point	: 132 ~ 157 ℃		
Flash point	: 50 °C (closed	cup)	
Relative Density	∶ 1.1 ~ 1.3 g/cm		
Solubility in Water	: Insoluble	(20 0)	
-	ILITY AND RE		
			l handling
Stability		Stable under norma	·
Conditions to Avoid		C	Direct sunlight, Fire
Incompatible Materials	: :	Strong oxidising ag	ents

Hazardous Decomposition Products : CO, CO₂

SECTION 11	OXICOLOGICAL INFORMATION
Acute toxicity	: LD/LC50 values that are relevant for classification [1-Ethoxypropan-2-ol]
	Oral-rat LD50 >5,000 mg/kg
	Dermal-rabbit LD50 >5,000 mg/kg
	[Glycol ether class solvent]
	Oral-rat LD50 >2,000 mg/kg
Eye irritation	Category 2A Causes serious eye irritation
Specific target organ toxicit (single exposure)	
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	TION
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)	: UN1993	
UN proper shipping name	(DOT, ADR, IMDG, IATA)	 FLAMMABLE LIQUID, N.O.S. (1-Ethoxypropan-2-ol) 	
UN Classification		: 3	3
Packing group	(DOT, ADR, IMDG, IATA)	: Ш	
Marine pollutant (Y/N)		: N	
EmS number		: F-E, S-E	

SECTION 15 REGULATORY INFORMATION

< EU Information >

Regulation (EC) No 1272/2008 (CLP)

5 ()	``			
Substance name	:	: [1-Ethoxypropan-2-ol]		
Hazard Class & Category	:	: Flammable liquids, Category 3		
		Specific target organ toxicity - single exposure, Category 3		
Symbols	:	GHS02, GHS07		
Signal word	:	Warning		
Hazard statements	:	H226 Flammable liquid and vapour		
		H336 May cause drowsiness or dizziness		

< 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) : Not Applicable

[ISO11014:2009] [Shachihata Inc.] [M-99N_orange_n] 5/5

CERCLA REPORTABLE QUANTITY (40 CFR 117,302) SARA TITLE III Section 313 (40 CFR 372) California Proposition 65

- : 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



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)