

# Safety Data Sheet (MSDS)

Issued Date : 24 December 2008

Revised Date : 16 September 2021

## SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name** : TAT INDELIBLE INK (Special Type) M-99N

Colour : (Yellow green)

STO-1/M-99N-YG (Small bottle)

STO-3/M-99N-YG (Large bottle)


**Colour**
**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**Contact (e-mail)** : [chem-analysis@ngy.shachihata.co.jp](mailto:chem-analysis@ngy.shachihata.co.jp)**Emergency Call** : + 81- 52- 521- 3600 (Shachihata Inc. [Japan] )**Recommended use** : Stamp ink

## SECTION 2 HAZARDS IDENTIFICATION

**GHS Classification****Physical Hazards**

Flammable liquids

Category 3

**Health Hazards**

Eye irritation

Category 2A

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** : Warning

**Hazard statement** : Flammable liquid and vapour (H226)  
 Causes serious eye irritation (H319)  
 May cause drowsiness or dizziness (H336)

**Precautionary statement****【Prevention】**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210)

Take action to prevent static discharges. (P243)

Wear eye protection. (P280)

Avoid breathing vapours. (P261)

Use only outdoors or in a well-ventilated area. (P271)

Wash hands thoroughly after handling. (P264)

**【Response】**

In case of fire : Use dry chemical powder, foam or carbon dioxide to extinguish. (P370+P378)

IF INHALED : Remove person to fresh air and keep comfortable for breathing. (P304+P340)

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	10 ~ 20	Confidential	none	none
Titanium dioxide	10 ~ 15	13463-67-7	none	none
Dyestuff	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)

1-Ethoxypropan-2-ol	TWA	50 ppm (skin)
Titanium dioxide	TWA	10 mg/m <sup>3</sup>

OSHA PEL

Titanium dioxide	TWA	15 mg/m <sup>3</sup>
------------------	-----	----------------------

DIRECTIVE 2000/39/EC

Not listed

Japan Society for Occupational Health (2020)

Titanium dioxide	Dusts Class 2	OEL (total dust)	4 mg/m <sup>3</sup>
------------------	---------------	------------------	---------------------

### 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 green liquid
- Odour** : Minor solvent odour
- pH** : Not applicable
- Boiling point** : 132 ~ 157 °C
- Flash point** : 50 °C (closed cup)
- Relative Density** : 1.1 ~ 1.3 g/cm<sup>3</sup> (25 °C)
- 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, CO<sub>2</sub>**SECTION 11 TOXICOLOGICAL 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 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) : UN1993
- UN proper shipping name** (DOT, ADR, IMDG, IATA) : FLAMMABLE LIQUID, N.O.S.  
 (1-Ethoxypropan-2-ol)
- UN Classification** : 3
- Packing group** (DOT, ADR, IMDG, IATA) : III
- Marine pollutant (Y/N)** : N
- EmS number** : F-E, S-E

**SECTION 15 REGULATORY INFORMATION**

## &lt; EU Information &gt;

Regulation (EC) No 1272/2008 (CLP)

- 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

## &lt; USA Information &gt;

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

CERCLA REPORTABLE QUANTITY (40 CFR 117,302)

: Not Applicable

SARA TITLE III Section 313 (40 CFR 372)

: Not Applicable

California Proposition 65

: 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)