

Safety Data Sheet (MSDS)

Issued Date : Dec. 19th, 2008

Revised Date : Jan. 18th, 2019

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name : TAT SOLVENT
 SOL-31, SOL-1-31 (Small bottle), SOL-3-31 (Large bottle)

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
Emergency Call : + 81- 52- 521- 3600 (Shachihata Inc. [Japan])
Recommended use : Stamp ink solvent



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 (respiratory tract irritation, narcotic effects)

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 respiratory irritation (H335)
 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 | 25 ~ 35 | 1569-02-4 | Flam. Liq. 3 Eye Irrit. 2A STOT. SE. 3 | H226 H319 H336 |
| (2-methoxymethylethoxy)propanol | 65 ~ 75 | 34590-94-8 | Flam. Liq. 4 STOT. SE. 3 | H227 H335 |
| 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 (2018)

(2-methoxymethylethoxy)propanol TWA 100 ppm

OSHA PEL

(2-methoxymethylethoxy)propanol TWA 100 ppm

DIRECTIVE 2000/39/EC

(2-methoxymethylethoxy)propanol TWA 50 ppm

Japan Society for Occupational Health (2018) Not listed

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 : colourless liquid
Odour : minor solvent odour
pH : Not applicable
Boiling point : 132 ~ 189 °C
Flash point : 49 °C (closed cup)
Relative Density (at 25°C) : 0.9 (g/cm³)
Solubility in Water : soluble

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
 [1-ethoxypropan-2-ol]
 Oral-rat LD50 >5,000 mg/kg

| | | |
|-----------------------------------|------|--------------|
| Dermal-rabbit | LD50 | >5,000 mg/kg |
| [(2-methoxymethylethoxy)propanol] | | |
| Oral-rat | LD50 | >5,000 mg/kg |
| Dermal-rabbit | LD50 | >5,000 mg/kg |

| | | |
|---|---|---|
| Eye irritation | : Category 2A | Causes serious eye irritation |
| Specific target organ toxicity (single exposure) | : Category 3 | May cause respiratory irritation May cause drowsiness or dizziness |
| Carcinogenicity | : This product does not contain any component that is considered 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) | : 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 RELATED MATERIAL, flammable |
| UN Classification | | : 3 |
| Packing group | (DOT, ADR, IMDG, IATA) | : III |
| 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 | : [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

CERCLA REPORTABLE QUANTITY (40 CFR 117,302) : Not Applicable

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

California Proposition 65 : Not listed

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

SECTION 16 OTHER INFORMATION



EU RoHS Directive(2011/65/EC)

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.