# Tissue-Tek® Reagent Alcohol 70% v/v

Safety Data Sheet

US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)
Issue date: 05/05/2020
Revision date: 12/16/2024 Version: B

## SECTION 1: Identification

### 1.1. Identification

| | | |
|---|---|---|
| Product form | : | Mixture |
| Product name | : | Tissue-Tek® Reagent Alcohol 70% v/v |
| Product code | : | 6021 |

### 1.2. Recommended use and restrictions on use

For general laboratory use.
To be used by qualified personals only.

### 1.3. Supplier

Sakura Finetek USA Inc.
1750 West 214th St.
Torrance, CA 90501
T 1-310-972-7800

### 1.4. Emergency telephone number

CHEMTREC 1-800-424-9300
Email: SDSsupport@sakuraus.com

## SECTION 2: Hazard(s) identification

### 2.1. Classification of the substance or mixture

**GHS US classification**

| | |
|---|---|
| **Physical hazards** | Highly flammable liquid and vapor |
| **Health hazards** | Harmful if swallowed |
| | Causes serious eye irritation |
| | Causes damage to organs |
| **Environmental hazards** | None |

### 2.2. GHS Label elements, including precautionary statements

**GHS US labeling**

**Hazard symbol**

| | |
|---|---|
| **Signal word** | Danger |
| **Hazard statement** | H302 Harmful if swallowed. |
| | H225 Highly flammable liquid and vapor |
| | H319 Causes serious eye irritation |
| | H370 Causes damage to organs |

**Precautionary statement**

*Prevention* - P210 Keep away from heat/sparks/open flames/hot surfaces.No smoking
P233 Keep container tightly closed
P240 Ground container and receiving equipment
P242 Use only non-sparking tools
P243 Take precautionary measures against static discharge
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

*Response* - P301+P312+P330 IF SWALLOWED: call a POISON CENTER/doctor if you feel unwell. Rinse mouth
P303+P361+P353 IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with water
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advise/attention
P307+P311 IF exposed: Call a POISON CENTER or doctor/physician.
P330 Rinse mouth.
P362+P364 Take off contaminated clothing and wash before reuse.
In case of Fire: Use dry sand, dry chemicals or alcohol resistant foam to extinguish.

*Storage* - Store in a cool, well-ventilated place. Store in a closed container, away from open flames or other sources of ignition.

*Disposal* - Incineration at a licensed chemical disposal facility is the preferred disposal method. Dispose of contents and container in accord with all applicable regulations.

### 2.3. Other hazards which do not result in classification

None known

### 2.4. Unknown acute toxicity (GHS US)

None known

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Mixtures

### 3.2. Mixtures

| Name | CAS Number | % |
|---|---|---|
| Ethanol | 64-17-5 | 63% v/v |
| Isopropanol | 67-63-0 | 3.5% v/v |
| Methanol | 67-56-1 | 3.5% v/v |

The specific chemical\ component identities and/or the exact component percentages of this material may be withheld as trade secrets.
This information is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of 29 CFR 1910.1200 (I)(1). Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, mutagen, and reproductive toxicant, respiratory tract and skin sensitizers in addition to oral/ inhalation acute toxicant in category 1 and 2). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents.

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

First-aid measures after inhalation : Move the person into fresh air. If not breathing, give artificial respiration. Consult a physician.

First-aid measures after skin contact : Wash off with soap and plenty of water. If concerned, consult a physician

First-aid measures after eye contact : Immediately flush eyes with copious amount of water for at least 15 minutes and consult a physician.

First-aid measures after ingestion : Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2. Most important symptoms and effects (acute and delayed)

No data available

### 4.3. Immediate medical attention and special treatment, if necessary

No data available

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Alcohol foam, carbon dioxide or dry chemical.

Unsuitable extinguishing media : Water is ineffective against alcohol fires but may be used to cool adjacent containers

### 5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Pyrolysis will release toxic carbon monoxide

### 5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Wear self-contained breathing apparatus and protective fire-fighting clothing

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Wear Personal protective Equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

#### 6.1.2. For emergency responders

Protective equipment : Wear Personal protective Equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

### 6.2. Environmental precautions

None known.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Stop leak and move containers from spill area if without risk. Do not let product enter drains.

Other information : Keep in suitable closed containers for disposal.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Wear lab coat, chemical safety goggles, and gloves. Avoid contact with eyes, skin or clothing.

Hygiene measures : Wash thoroughly after handling.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a cool, well ventilated place. Store in a closed container, away from open flames or other sources of ignition.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

**US. ACGIH Threshold Limit Values**

| Components | Type | Value | Form |
|---|---|---|---|
| Ethanol | TWA | 1000 ppm | Liquid |
| | STEL | 1000 ppm | |
| Methanol | TWA | 200 ppm | |
| | STEL | 250 ppm | |
| Isopropanol | TWA | 200 ppm | |
| | STEL | 400 ppm | |

**ACGIH Biological Exposure Indices**

| Components | Value | Specimen |
|---|---|---|
| Methanol | 15 mg/L | Urine, End of shift |
| Isopropanol | 40 mg/L | Urine, End of shift |

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Handle in accordance with good industrial hygiene and safety practice. Wash hands before and after use of product.

General hygiene considerations : Wash hands before and after use of product.

### 8.3. Individual protection measures/Personal protective equipment

**Hand protection:**

Chemical resistant, impervious gloves should be worn at all times when handling this product.

**Eye protection:**

Chemical safety goggles/glasses.

**Skin and body protection:**

Appropriate personal protective equipment for the body, foot and any additional skin protection measures should be selected based on the tasks being performed and risks involved.

**Respiratory protection:**

Use air purifying full-face particle respirator based on the tasks being performed and risks involved.

**Personal protective equipment symbol(s):**

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

**Reagent Alcohol**

| | | |
|---|---|---|
| Physical state | : | Liquid |
| Color | : | Colorless |
| Odor | : | Characteristic alcohol |
| Odor threshold | : | No data available. |
| pH | : | Not applicable. |
| Melting point | : | No data available. |
| Freezing point | : | No data available. |
| Boiling point | : | 183°F |
| Flash point | : | No data available. |
| Relative evaporation rate (butyl acetate=1) | : | 1 |
| Flammability | : | No data available. |
| Vapor pressure | : | 40 @ 19C |
| Relative vapor density at 20°C | : | 1.6 (air=1) |
| Relative density | : | 0.89 g/ml |
| Solubility | : | Infinitely miscible with water |
| Partition coefficient n-octanol/water (Log Pow) | : | No data available. |
| Auto-ignition temperature | : | No data available. |
| Decomposition temperature | : | No data available. |
| Viscosity, kinematic | : | No data available. |
| Viscosity, dynamic | : | No data available. |
| Explosion limits | : | No data available. |
| Explosive properties | : | No data available. |
| Oxidizing properties | : | No data available. |

### 9.2. Other information

None

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No data available

### 10.2. Chemical stability

Freezes at low temperature

### 10.3. Possibility of hazardous reactions

Vapors may form explosive mixture with air.

### 10.4. Conditions to avoid

Heat, flame and sources of ignition.

### 10.5. Incompatible materials

Oxidizers

### 10.6. Hazardous decomposition products

Carbon dioxide, carbon monoxide

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Oral LD50 Category 4. ATE = 300 - 2000 mg

Acute toxicity (dermal) : Dermal LD50 Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg. Category 4. ATE = 1000 - 2000 mg/kg

Acute toxicity (inhalation) : Vapor LC50 Category 4. ATE = 10

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|---|---|
| Ethyl alcohol | LD50 = 10470 mg/kg OECD 401 (Rat) 3450 mg/kg ( Mouse ) | Not listed | LC50 = 117-125 mg/l (4h) OECD 403 (rat) 20000 ppm/10H (rat) |
| Methyl alcohol | LD50=1187–2769mg/kg(Rat) | LD50 = 17100 mg/kg ( Rabbit | LC50 = 128.2 mg/L ( Rat ) 4 h |
| Isopropyl alcohol | 5045 mg/kg ( Rat ) 3600 mg/kg ( Mouse ) | 12800 mg/kg ( Rat ) | 72.6 mg/L ( Rat ) 4 h |

Skin corrosion/irritation : May cause skin, eye, and respiratory tract irritation

Serious eye damage/irritation : May cause skin, eye, and respiratory tract irritation

Respiratory or skin irritation : May cause skin, eye, and respiratory tract irritation

Germ cell mutagenicity : No information available

Carcinogenicity :

| Component | CAS No | IARC | NTP | ACGIH | OSHA | Mexico |
|---|---|---|---|---|---|---|
| Ethyl alcohol | 64-17-5 | Not listed | Known | A3 | Not listed | A3 |
| Methyl alcohol | 67-56-1 | Not listed | Not listed | Not listed | Not listed | Not listed |
| Isopropyl alcohol | 67-63-0 | Not listed | Not listed | Not listed | Not listed | Not listed |

Known - Known Carcinogen
A3 - Animal Carcinogen (ACGIH)
A3 - Confirmed Animal Carcinogen (Mexico)

Reproductive toxicity : California Proposition 65. Reproductive toxicity

STOT-single exposure : Optic nerve Central nervous system (CNS)

STOT-repeated exposure : None known

Aspiration hazard : No information available

Symptoms related to the physical, chemical and toxicological characteristics information on toxicological effects : Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

## SECTION 12: Ecological information

### 12.1. Toxicity

**100% Reagent Alcohol**

Ecology - general : No data available.

### 12.2. Persistence and degradability

Biodegradable

### 12.3. Bioaccumulative potential

Ethanol evaporates quickly and is not expected to bioaccumulate. The material is removed from the air by dry and liquid adsorption. The half-life for ethanol in the atmosphere is one to ten days.

### 12.4. Mobility in soil

No data available.

### 12.5. Other adverse effects

No data available.

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste treatment methods : Empty remaining contents. Dispose of as unused product. Do not reuse empty containers. Incineration at a licensed chemical disposal facility is the preferred disposal method. Dispose of contents and container in accord with all applicable regulations.

## SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

### 14.1. UN number

UN1170

### 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Ethanol solutions
Proper Shipping Name (IMDG) : Ethanol solutions
Proper Shipping Name (IATA) : Ethanol solutions

### 14.3. Transport hazard class(es)

**DOT**
Transport hazard class(es) (DOT) : 3

**IMDG**
Transport hazard class(es) (IMDG) : 3

**IATA**
Transport hazard class(es) (IATA) : 3

### 14.4. Packing group

Packing group (DOT) : II
Packing group (IMDG) : II
Packing group (IATA) : II

### 14.5. Environmental hazards

Other information : N/A

### 14.6. Special precautions for user

**DOT**
N/A

**IMDG**
N/A

**IATA**
N/A

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

None

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

| | |
|---|---|
| **TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)** | No information available |
| **OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)** | No information available |

| | |
|---|---|
| **CERCLA Hazardous Substance List (40 CFR 302.4)** | No information available |
| **Superfund Amendments and Reauthorization Act of 1986 (SARA)** | No information available |
| **SARA 302 Extremely hazardous substance** | Not subject to reporting requirement |
| **SARA 311/312 Hazardous chemical** | Fire hazard, acute health hazard, chronic health hazard |
| **SARA 313 (TRI reporting)** | Methanol, isopropanol |

### 15.2. US State regulations

**US. Massachusetts RTK - Substance List**
Ethanol, Methanol, Isopropanol
**US. New Jersey Worker and Community Right-to-Know Act**
Ethanol, Methanol, Isopropanol
**US. Pennsylvania Worker and Community Right-to-Know Law**
Ethanol, Methanol, Isopropanol
**US. California Proposition 65**
*WARNING*: This product can expose you to chemicals including Methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

## SECTION 16: Other information

US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

Sakura Finetek USA, Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.