



Tissue-Tek® SmartWrite® Print Head Cleaning Pen

Safety Data Sheet

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

Issue date: 06/12/2012

Revision date: 12/16/2024 Version: D

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Tissue-Tek® SmartWrite® Print Head Cleaning Pen
Product code : 9032

1.2. Recommended use and restrictions on use

Tissue-Tek® SmartWrite® Printers

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 Flammable solids Category 2
Health hazards Serious eye damage/eye irritation Category 2A
Specific target organ toxicity, single exposure Category 3 narcotic effects
OSHA defined hazards Not classified.

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Label elements



Signal word

Warning

Hazard statement

Flammable solid. Causes serious eye irritation. May cause drowsiness or dizziness.

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Precautionary statement *Prevention* - Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Avoid breathing mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/eye protection/face protection.

Response - If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. If eye irritation persists: Get medical advice/attention. In case of fire: Use appropriate media to extinguish.

Storage - Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal - Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3. Other hazards which do not result in classification

None known.

2.4. Unknown acute toxicity (GHS US)

This product is a clear liquid with an alcohol odor impregnated on a cellulose pad, polypropylene pad, or felt pen core. There is a small amount of liquid on the pads and no free liquid in the packages.

Product is packaged for the consumer market under 16 CFR 1500.83 (Exemptions for small packages, minor hazards, and special circumstances).

SECTION 3: Composition/Information on ingredients

3.1. Substances

Mixture

3.2. Mixtures

Name	Product identifier	%
Isopropyl alcohol	67-63-0	15 - 25

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 (l)(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 : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention, if needed.

First-aid measures after skin contact : Wash off with soap and water. Get medical attention if irritation develops and persists.

First-aid measures after eye contact : Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists

First-aid measures after ingestion : Due to the physical nature of this product, ingestion is unlikely. First aid normally not needed for small amounts ingested by transferring from hand to mouth. Contact physician if larger quantity has been consumed. If product is swallowed, call a poison control center or physician.

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

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

4.3. Immediate medical attention and special treatment, if necessary

Provide general supportive measures and treat symptomatically. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO₂).
Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
Use standard firefighting procedures and consider the hazards of other involved materials.
The product contains: Highly flammable liquid.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Keep unnecessary personnel away. Avoid prolonged or repeated breathing of vapor. Ventilate closed spaces before entering them. For personal protection, see section 8 of the SDS.

6.1.2. For emergency responders

Protective equipment : For personal protection, see section 8 of the SDS.

6.2. Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material.
Other information : Collect spillage with shovel, broom or the like and reuse, if possible. Following product recovery, flush area with water. Clean surface thoroughly to remove residual contamination.
Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

6.4. Reference to other sections

For further information refer to section 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Do not handle, store or open near an open flame, sources of heat or sources of ignition. When using do not smoke. Take precautionary measures against static discharges. Avoid breathing mist or vapor. Avoid contact with eyes. Avoid prolonged exposure. Wear appropriate personal protective equipment.
- Hygiene measures : Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store locked up. Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)		
Components	Type	Value
Isopropyl alcohol (CAS 67-63-0)	PEL	980 mg/m3 400 ppm

US. ACGIH Threshold Limit Values		
Components	Type	Value
Isopropyl alcohol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm

US. NIOSH: Pocket Guide to Chemical Hazards		
Components	Type	Value
Isopropyl alcohol (CAS 67-63-0)	STEL	1225 mg/m3
		500 ppm
	TWA	980 mg/m3 400 ppm

ACGIH Biological Exposure Indices				
Components	Value	Determinant	Specimen	Sampling Time
Isopropyl alcohol (CAS 67-63-0)	40 mg/l	Acetone	Urine	*

* - For sampling details, please see the source document.

8.2. Appropriate engineering controls

- Appropriate engineering controls : General ventilation normally adequate. Provide eyewash station. In locations where product is routinely used, and there is risk of contact with eyes, provide an eyewash station.
- General hygiene considerations : When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
Not normally needed. Risk of contact: Wear appropriate chemical resistant gloves.

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Eye protection:
Not normally needed. Risk of contact: Wear safety glasses with side shields (or goggles).
Skin and body protection:
Not normally needed. Risk of contact: Wear protective clothing appropriate for the risk of exposure.
Respiratory protection:
Under normal conditions, respirator is not normally required. Respiratory protection must be used if air contamination exceeds acceptable level.

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid impregnated on a cellulose pad, fabric pad or felt pen core.
Color	: Not available.
Odor	: Alcohol.
Odor threshold	: Not available.
pH	: Not available.
Melting point	: -121 °F (-85 °C) (isopropanol)
Freezing point	: -121 °F (-85 °C) (isopropanol)
Boiling point	: 180 °F (82.22 °C) @ 760 mmHg (isopropanol)
Flash point	: 54.0 °F (12.2 °C) (isopropanol)
Relative evaporation rate (butyl acetate=1)	: 1.2 (BuOAc=1) (isopropanol)
Flammability	: Solid containing flammable liquid. Flammability limit - lower (%) - 2 % (isopropanol) Flammability limit - upper (%) - 12.7 % (isopropanol)
Vapor pressure	: 32.25 mm Hg @ 20°C (isopropanol)
Relative vapor density at 20°C	: 2.1 (isopropanol)
Relative density	: 0.78 g/cm3 (isopropanol)
Solubility	: Infinite
Partition coefficient n-octanol/water (Log Pow)	: Not available
Auto-ignition temperature	: > 662 °F (> 350 °C) (isopropanol)
Decomposition temperature	: Not available.
Viscosity, kinematic	: Not available.
Viscosity, dynamic	: Not available.
Explosion limits	: Not explosive.
Explosive properties	: Not explosive.
Oxidizing properties	: Not oxidizing.
VOC (Weight %)	: 787 g/l

9.2. Other information

None

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport.

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10.2. Chemical stability

Material is stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources. Contact with incompatible materials.

10.5. Incompatible materials

Strong oxidizing agents. Aldehydes. Chlorine. Ethylene Oxide. Acids. Isocyanates.

10.6. Hazardous decomposition products

Thermal decomposition may produce smoke and oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not likely, due to the form of the product.
Narcotic effects.

Components	Species	Test Results
Isopropyl alcohol (CAS 67-63-0)		
Acute		
<i>Oral</i>		
LD50	Rat	4.7 g/kg

Acute toxicity (dermal) : No adverse effects due to skin contact are expected.
Narcotic effects.

Components	Species	Test Results
Isopropyl alcohol (CAS 67-63-0)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	12800 mg/kg

Acute toxicity (inhalation) : May cause drowsiness and dizziness.

Skin corrosion/irritation : Prolonged skin contact may cause temporary irritation.

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitization : Not a respiratory sensitizer. This product is not expected to cause skin sensitization.

Germ cell mutagenicity : No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity : This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Reproductive toxicity : This product is not expected to cause reproductive or developmental effects.

STOT-single exposure : May cause drowsiness and dizziness.

STOT-repeated exposure : Not classified.

Aspiration hazard : Not an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics : Headache. May cause drowsiness and dizziness. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Further information : Toxicological effects are attributable to the liquid saturant.

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general

: The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

<u>Components</u>	<u>Species</u>	<u>Test Results</u>
Isopropyl alcohol (CAS 67-63-0)		
<i>Aquatic</i>		
Fish	LC50	Bluegill (<i>Lepomis macrochirus</i>) > 1400 mg/l, 96 hours

12.2. Persistence and degradability

No data is available on the degradability of this product.

12.3. Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Isopropyl alcohol (CAS 67-63-0) 0.05

12.4. Mobility in soil

Mobile in soil.

12.5. Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods

: Since emptied containers may retain product residue, follow label warnings even after container is emptied. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

14.1. Transport information

DOT

Not regulated as dangerous goods. Special Provision 47 found in 49 CFR 172.102 applies to this product

IMDG

Not regulated as dangerous goods. Special Provision 216 found in IMDG Code applies to this product

IATA

Not regulated as dangerous goods. Special Provision A46 found in IATA DGR applies to this product

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

Not established.

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SECTION 15: Regulatory information

15.1. US Federal regulations

This product contains a "Hazardous Chemical" with potential for exposure as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)	Not regulated.	
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	Not listed.	
CERCLA Hazardous Substance List (40 CFR 302.4) Isopropyl alcohol (CAS 67-63-0) LISTED		
Superfund Amendments and Reauthorization Act of 1986 (SARA) Hazard categories Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No		
SARA 302 Extremely hazardous substance	Not listed.	
SARA 311/312 Hazardous chemical	Yes	
SARA 313 (TRI reporting)		
Chemical name	CAS number	% by wt.
Isopropyl alcohol	67-63-0	15-25

15.2. International regulations

Country(s) or Region	Inventory Name	On Inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes
*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).		
*A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).		

15.3. US State regulations

US. Massachusetts RTK - Substance List

Isopropyl alcohol (CAS 67-63-0)

US. New Jersey Worker and Community Right-to-Know Act

Isopropyl alcohol (CAS 67-63-0)

US. Pennsylvania Worker and Community Right-to-Know Law

Isopropyl alcohol (CAS 67-63-0)

US. Rhode Island RTK

Isopropyl alcohol (CAS 67-63-0)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

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SECTION 16: Other information

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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.