



SAKURA FINETEK USA, INC.

Safety Data Sheet

Tissue-Tek Prisma® Differentiator, part of Tissue-Tek Prisma® H&E Stain Kit #2

SECTION 1: Identification

GHS Product identifier

Product name Tissue-Tek Prisma® Differentiator, part of Tissue-Tek Prisma® H&E Stain Kit #2
Product number 4903, part of 4900

Recommended use of the chemical and restrictions on use

For use on Sakura Finetek Tissue-Tek Prisma® and Tissue-Tek Prisma® Plus Automated Slide Stainers

Supplier's details

Name Sakura Fintek USA, Inc.
Address 1750 W 214th St
Torrance CA 90501
USA
Telephone 1-310-972-7800
email SDSsupport@SakuraUS.com
Emergency phone number Chemtrec 1-800-424-9300

SECTION 2: Hazard identification

Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200)

- Acute toxicity, oral, Cat. 4
- Flammable liquids, Cat. 2
- Skin corrosion/irritation, Cat. 1A
- Eye damage/irritation, Cat. 1
- Specific target organ toxicity (single exposure), Cat. 1

GHS label elements, including precautionary statements

Pictograms



Signal word

Danger

Hazard statement(s)

H302 Harmful if swallowed
H225 Highly flammable liquid and vapor

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H318 Causes serious eye damage
H370 Causes damage to organs

Precautionary statement(s)

P264 Wash exposed areas thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P501 Dispose of contents/container in accordance with governmental regulations.
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P240+ P241+ P243 Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Take precautionary measures against static discharge.

P280 Wear protective gloves/eye protection/face protection/protective clothing.
P233+P403+P235+P405 Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up

P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P363 Wash contaminated clothing before reuse.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310 Immediately call a POISON CENTER/doctor.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P308+P311 IF exposed or concerned: Call a POISON CENTER/doctor.
P370+P378 In case of fire: Use appropriate media/CO₂ to extinguish.

SECTION 3: Composition/information on ingredients

Mixtures

Hazardous components

1. Acetic acid

Concentration 6 % (weight)
EC no. 200-580-7
CAS no. 64-19-7
Index no. 607-002-00-6

2. Ethanol

Concentration 60-62 % (weight)
EC no. 200-578-6
CAS no. 64-17-5
Index no. 603-002-00-5

3. Methanol

Concentration 3-4 % (weight)
EC no. 200-659-6
CAS no. 67-56-1
Index no. 603-001-00-X

4. Isopropanol

Concentration 3-4 % (weight)
EC no. 200-661-7

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CAS no. 67-63-0
Index no. 607-403-00-6

SECTION 4: First-aid measures

Description of necessary first-aid measures

If inhaled	Remove victim to fresh air if coughing or difficulty in breathing is experienced. Consult a physician if symptoms persist or worsen. Administer oxygen or artificial respiration as needed.
In case of skin contact	Remove contaminated clothing, including footwear; wash before reuse or discard. For minor exposure, wash affected area with water and mild soap, rinsing thoroughly. In cases of prolonged, repeated or extensive exposure, rinse affected area for at least 15 minutes. Consult a physician.
In case of eye contact	Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present. Continue rinsing. Immediately call a poison center or doctor.
If swallowed	Rinse mouth. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Call a poison center or doctor if you feel unwell.

Most important symptoms/effects, acute and delayed

Causes severe skin irritations. Causes serious eye damage. Toxic if swallowed. Toxic if absorbed through skin. May be harmful if inhaled. Causes respiratory irritation.

Indication of immediate medical attention and special treatment needed, if necessary

See listed first-aid procedures. Product contains alcohol. Symptoms will vary based on alcohol exposure. Acetic acid content is equivalent to vinegar solution. Treat according to symptoms.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.

Specific hazards arising from the chemical

Hazardous products of combustion: carbon monoxide and carbon dioxide.

Special protective actions for fire-fighters

Fire-fighters may wear self-contained breathing apparatus if necessary.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Avoid inhalation of vapors. Avoid contact with skin and eyes. Eliminate sources of ignition. Take precautionary measures against static electricity. Vapors can accumulate in low areas.

Methods and materials for containment and cleaning up

Eliminate sources of ignition with large spills. Take precautionary measures against static electricity. Contain and soak up spill with inert absorbent material. Small spills can be cleaned with a damp sponge. Use clean non-sparking tools to

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collect absorbent materials. Discard absorbents and other contaminated solids in a suitable trash receptacle. Dispose absorbents and other contaminated solids as a hazardous waste. Wash contaminated area with soap and water.

SECTION 7: Handling and storage

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapors. Wear protective gloves, impermeable aprons and splash-proof goggles. Keep away from sources of ignition. Use proper grounding procedures for storage and when moving to transfer containers.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Storage class (TRGS 510): Flammable liquids

SECTION 8: Exposure controls/personal protection

Control parameters

TWA (Inhalation): 10 ppm, 25 mg/m³; USA (OSHA)
USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants

1. Ethanol (CAS: 64-17-5)

PEL (Inhalation): 1000 ppm (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

2. Methanol (CAS: 67-56-1 EC: 200-659-6)

PEL-TWA (Inhalation): 200 ppm, 260 mg/m³ (OSHA)
Headache. Nausea. Dizziness. Eye damage Substances for which there is a Biological Exposure Index or Indices
Danger of cutaneous absorption

3. Isopropanol (CAS: 67-63-0)

PEL (Inhalation): 400 ppm (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

Appropriate engineering controls

Good general room ventilation should be provided so that exposure limits are not exceeded. Provide exhaust ventilation to control vapors.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Wear nitrile or chemical resistant gloves. Do not use latex surgical gloves for protection and protective clothing

Respiratory protection

With adequate room ventilation, none needed for this concentration. When risk assessment shows one is necessary, wear respirator with multi-vapor cartridge.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

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Physical state	Liquid
Appearance	Clear Liquid
Color	Colorless
Odor	Characteristic ethanol odor; mild vinegar
Odor threshold	No data available
Melting point/freezing point	No data available
Boiling point or initial boiling point and boiling range	Estimate 173°F (78°C)
Flammability	No data available
Lower and upper explosion limit/flammability limit	No data available
Flash point	Estimate 62°F (17°C), closed cup
Auto-ignition temperature	No data available
Decomposition temperature	No data available
pH	No data available
Kinematic viscosity	No data available
Solubility	Complete in water
Partition coefficient n-octanol/water (log value)	No data available
Vapor pressure	No data available
Evaporation rate	No data available
Density and/or relative density	No data available
Relative vapor density	No data available

SECTION 10: Stability and reactivity

Reactivity

No hazardous reactions if stored and handled as indicated.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

The product is chemically stable.

Conditions to avoid

Heat, flames and sparks. Temperatures greater than flash point.

Incompatible materials

Alkali, strong oxidants, strong inorganic acids. Acid chlorides, Acid anhydrides, Alkali metals, Reducing agents, Aluminium, Halogenated compounds, Acids, Peroxides

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - No data available

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Nominal measures of toxicity (following data is for 100% ethanol)

Components Species Test Results

Acute toxicity, inhalation Human LDLO=1,400 mg/kg

Acute toxicity, oral Rat LD50=7,069 mg/kg

Acute toxicity, inhalation Rat LD50=20,000 mg/kg, 10hrs

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Isopropanol: ACUTE/CHRONIC HAZARDS: This compound is an irritant of the skin, eyes, mucous membranes and upper respiratory tract [269]. It is flammable and flashback along the vapor trail may occur [371]. When heated to decomposition it emits acrid smoke and toxic fumes of carbon monoxide, carbon dioxide and unidentified organic compounds [043,058,269].

Skin corrosion/irritation

May cause severe skin irritation.

Serious eye damage/irritation

May cause serious eye damage.

Respiratory or skin sensitization

No data available.

Germ cell mutagenicity

No data available.

Carcinogenicity

None as defined by 29 CFR 1910.1200

Reproductive toxicity

No data available.

Specific target organ toxicity (STOT) - single exposure

Specific target organ toxicity, single exposure (STOT-SE): Ethanol content causes nervous system depression, narcosis, damage to heart

Specific target organ toxicity (STOT) - repeated exposure

No data available.

Aspiration hazard

No data available.

SECTION 12: Ecological information

Toxicity

No environmental data is known for this product.

The following data are from studies using 100% ethanol.

Components	Duration	Species	Test Results
Acute toxicity fish	96 hours	Oncorhynchus mykiss	LC50 > 10,000 mg/l
		Pimephales promelas	LC50 > 13,400 mg/l
Aquatic plant	96 hours	Chlorella vulgaris	1,000 mg/l (growth inhibition)
Toxicity to microorganisms	34 days	Pseudonoma putida	6,500 mg/l Inhibition of cell multiplication begins

Persistence and degradability

No information available.

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

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Other adverse effects

No information available.

SECTION 13: Disposal considerations

Disposal methods

Contact a licensed professional waste disposal service to dispose of this material. Proper waste disposal is the generator's responsibility. Follow federal, state (provincial) and local regulations.

SECTION 14: Transport information

DOT (US)

UN Number: UN2924

Class: Hazard Class: 3 (8)Packing Group: II

Proper Shipping Name: Flammable liquid, corrosive n.o.s. (ethanol, acetic acid)

Reportable quantity (RQ): N/A

Marine pollutant: N/A

Poison inhalation hazard: N/A

IMDG

UN Number: UN2924

Class: 3

Packing Group: II

EMS Number: F-E, S-C

Proper Shipping Name: Flammable liquid, corrosive n.o.s. (ethanol, acetic acid)

IATA

UN Number: UN2924

Class: Hazard Class: 3 (8)

Packing Group: II

Proper Shipping Name: : Flammable liquid, corrosive n.o.s. (ethanol, acetic acid)

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

Massachusetts Right To Know Components

Acetic acid CAS number: 64-19-7

Ethanol CAS number: 64-17-5

Methanol CAS number: 67-56-1

Isopropyl alcohol CAS number: 67-63-0

New Jersey Right To Know Components

Acetic acid CAS number: 64-19-7

ETHYL ALCOHOL CAS number: 64-17-5

Methanol CAS number: 67-56-1

Isopropyl alcohol CAS number: 67-63-0

Pennsylvania Right To Know Components

Acetic acid CAS number: 64-19-7

Ethanol CAS number: 64-17-5

Methanol CAS number: 67-56-1

Isopropyl alcohol CAS number: 67-63-0

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SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

The following components are subject to reporting levels established by SARA Title III, Section 313:

Isopropyl alcohol

CAS number: 67-63-0

SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

California Prop. 65 Components

WARNING! This product contains methanol, which is known to State of California to cause cancer, birth defects, or any other reproductive harm.

Canadian Domestic Substances List (DSL)

Chemical name: Acetic acid

CAS: 64-19-7

Chemical name: Ethanol

CAS: 64-17-5

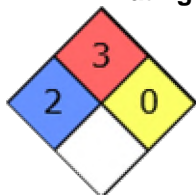
Chemical name: Methanol

CAS: 67-56-1

Chemical name: 2-Propanol

CAS: 67-63-0

NFPA Rating



SECTION 16: Other information

Further information/disclaimer

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.