



SAFETY DATA SHEET

SDS#: GS-33524 Rev.A
Revision Date: 10/22/2021

Original Preparation Date: 09/28/2021

1. Identification

Product identifier Tissue-Tek Genie® Proteinase K
Other means of identification
Product code 9811-M100
Recommended use For use with Tissue-Tek Genie® Advanced Staining System
Recommended restrictions Not recommended for use with systems other than the Tissue-Tek Genie Advanced Staining System
Manufacturer/Importer/Supplier/Distributor information
Manufacturer/Supplier Sakura Finetek USA, Inc.
Address 1750 W 214th St
Torrance, CA 90501
United States
Telephone 1 (310) 972-7800
Emergency phone number Chemtrec, 1 (800) 424-9300
Email SDSSupport@Sakuraus.com

2. Hazard(s) identification

Physical hazards Not a hazardous substance or mixture

Health hazards Not a hazardous substance or mixture

Label elements

Hazard symbol N/A

Signal word N/A

Hazard statement N/A

Precautionary statement

Prevention N/A

Response N/A

Storage Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up. Store at 2C-8C.

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

Hazard(s) not otherwise classified (HNOC) None Known

3. Composition/information on ingredients

Mixtures: Mixtures

Chemical name	CAS number	%
Sodium Azide	26628-22-8	<0.1%

4. First-aid measures

Inhalation Remove from exposure into fresh air. Perform artificial respiration if needed. Get medical aid if symptoms appear. Call poison control center if symptoms occur.

Skin contact Rinse exposed area with plenty of water for at least 15 minutes. If irritation appears, get medical help.

Eye contact	Remove contact lenses and rinse eyes with plenty of water for at least 15 minutes. Make sure to rinse underneath eyelids. If irritation appears, get medical help.
Ingestion	Do not induce vomiting. Call poison control center or physician immediately.
Most important symptoms/ effects, acute and delayed	The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed. Treat Symptomatically.
General Information	In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

5. Fire-fighting measures

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	N/A
Specific hazards arising from the chemical	Hydrogen chloride gas, Sodium oxides. Nitrogen oxides (NOx) Sodium oxides
Special protective equipment/ precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/ instructions	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Cool containers exposed to heat with water spray and remove container, if no risk is involved.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Not a flammable material

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use personal protection recommended in Section 8. As an immediate precautionary measure, isolate spill or leak area in all directions. Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate enclosed areas.
Methods and materials for containment and cleaning up	Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. For precautions see section 2.
Conditions for safe storage, including any incompatibilities	Keep container tightly closed in a dry and well-ventilated place. Opened containers must be carefully resealed and kept upright to prevent leakage.

8. Exposure controls/personal protection

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	ype	Value	Form
Sodium azide (CAS: 26628-22-8)	TLV® (Inhalation) (Lung damage. Cardiac impairment. Not classifiable as a human carcinogen)	0.29 mg/m3 (C); 0.1 ppm (C)	hydrazoic acid vapor (ACGIH)

REL-C (Inhalation): (Potential for dermal absorption)	0.29 mg/m3 (C); 0.1 ppm (C)	hydrazoic acid vapor (NIOSH)
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Appropriate engineering controls Use under a fume hood. Ensure eye wash stations and showers are near workstation.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles).
Hand protection	Wear appropriate chemical resistant gloves.
Other	Wear suitable protective clothing.
Respiratory protection	Not required under normal use conditions. Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
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.

9. Physical and chemical properties

Appearance	
Physical state	Clear Liquid
Color	Purple
Odor	No data available
pH	
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	Not a flammable material
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility (water)	Soluble
Auto-ignition temperature	Not applicable
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	Not an explosive mixture
Oxidizing properties	Not an oxidizing material

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid temperatures exceeding the flash point. Avoid contact with incompatible materials.
Incompatible materials	Calcium chloride: Strong acids, Borane/boron oxides, Zinc, Calcium oxide, Methyl vinyl ether, Calcium chloride is attacked by bromine trifluoride
Hazardous decomposition products	Nitrogen oxides (NOx), Sodium oxides

11. Toxicological information

Information on likely routes of exposure

Inhalation	No data available
Skin contact	Prolonged skin contact may cause temporary irritation.
Eye contact	Causes serious eye irritation.
Ingestion	Expected to be a low ingestion 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.
Information on toxicological effects	
Acute toxicity	Harmful if swallowed. May cause an allergic skin reaction.

Components	Species	Test Results
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SODIUM AZIDE CAS: 26628-22-8

Acute

LD50 Oral: 27 mg/kg (Rat)
LD50 Dermal: 20 mg/kg (Rabbit)
LC50 Inhalation: 0.054-0.52 mg/l (dust)

SODIUM CITRATE TRIBASIC DIHYDRATE CAS: 6132-04-3

Acute

LD50 Oral - Mouse - male and female - 5,400 mg/kg (OECD Test Guideline 401)
LD50 Dermal - Rat - male and female - > 2,000 mg/kg (OECD Test Guideline 402)

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation

Serious eye damage/eye irritation May cause irritation

Respiratory or skin sensitization

Respiratory sensitization May cause irritation

Skin sensitization May cause irritation

Germ cell mutagenicity Mutagenicity has occurred in experimental animals

Carcinogenicity No information available

IARC Monographs. Overall Evaluation of Carcinogenicity Not listed.

NTP Report on Carcinogens Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Not listed.

Reproductive toxicity Not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

Repeated dose toxicity No data available.

Aspiration hazard Not an aspiration hazard.

Chronic effects No data available

Additional effects No data available.

12. Ecological information

Ecotoxicity The product contains following substances which are hazardous for the environment. May cause long-term adverse effects in the aquatic environment

Components	Species	Test Results
Sodium Azide		
Aquatic		
Fish	LC50 = 5.46 mg/L, 96h flow-through (Pimephales promelas)	
> 100 mg/l, 96 hours LC50: = 0.7 mg/L, 96h (Lepomis macrochirus) LC50: = 0.8 mg/L, 96h (Oncorhynchus mykiss)		
Persistence and degradability	No data available	
Bioaccumulative potential	No data available	
Mobility in soil	Will likely be mobile in the environment due to its water solubility	
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.	

13. Disposal considerations

Disposal instructions	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.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal

14. Transport information

DOT	Not regulated
UN number	Not applicable
UN proper shipping name	Not applicable
Transport hazard class(es)	Not applicable
Packing group	Not applicable
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
IMDG	Not regulated
UN number	Not applicable
UN proper shipping name	Not applicable
Transport hazard class(es)	Not applicable
Subsidiary risk	Not applicable
Packing group	Not applicable
Marine pollutant	No
EmS	Not applicable
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling. Not subject to regulation if transported by ground or water.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not established.
IATA	Not regulated
UN number	Not applicable
UN proper shipping name	Not applicable
Transport hazard class(es)	Not applicable
Subsidiary risk	Not applicable

Packing group Not applicable
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

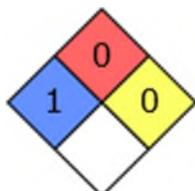
15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" 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) Not listed.
Superfund Amendments and Reauthorization Act of 1986 (SARA) Fire Hazard - no
Pressure Hazard - No
Reactivity Hazard - No
SARA 302 Extremely hazardous substance Not listed.
SARA 311/312 Hazardous chemical Acute Health Hazards
SARA 313 (TRI reporting) Not regulated
US state regulations
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List Not regulated
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated
Safe Drinking Water Act (SDWA) Not regulated
US. California Proposition 65 This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

16. Other information, including date of preparation or last revision

Issue date 09/28/2021
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Version # A

NFPA ratings



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