



Tissue-Tek Genie® DUO Mouse-DAB/Rabbit-AP Red Dual Detection Kit

Safety Data Sheet

US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)
Issue date: 05/31/2019
Revision date: 06/18/2024 Version: B

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Tissue-Tek Genie® DUO Mouse-DAB/Rabbit-AP Red Dual Detection Kit
Product code : 8837-K250

1.2. Recommended use and restrictions on use

For use with Tissue-Tek Genie® Advanced Staining System.
Not recommended for use with systems other than Tissue-Tek Genie® Advanced Staining System.

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

Components	GHS US classification
Peroxidase Block	Skin Irrit. 2, H315 Eye Dam. 1, H318
DAB Substrate Chromogen	Carc. 1B, H350
DAB Substrate Buffer	Skin Irrit. 2, H315 Eye Irrit. 2, H319

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Components	Pictograms	Signal word	Hazard statements	Precautionary statements
Peroxidase Block		Danger	H315 - Causes skin irritation H318 - Causes serious eye damage	P264 - Wash hands, forearms and face thoroughly after handling. P280 - Wear protective gloves, protective clothing, eye protection. P302+P352 - If on skin: Wash with plenty of soap and 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. P310 - Immediately call a doctor, a POISON CENTER. P332+P313 - If skin irritation occurs: Get medical advice/attention.

Tissue-Tek Genie® DUO Mouse-DAB/Rabbit-AP Red Dual Detection Kit

Safety Data Sheet

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

				P362+P364 - Take off contaminated clothing and wash it before reuse.
DAB Substrate Chromogen		Danger	H350 - May cause cancer	P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P280 - Wear protective clothing, eye protection, face protection. P308+P313 - If exposed or concerned: Get medical advice/attention. P405 - Store locked up. P501 - Dispose of contents/container to an approved waste disposal plant.
DAB Substrate Buffer		Warning	H315 - Causes skin irritation H319 - Causes serious eye irritation	P264 - Wash hands, forearms and face thoroughly after handling. P280 - Wear protective clothing, eye protection, face protection. P302+P352 - If on skin: Wash with plenty of soap and 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. P332+P313 - If skin irritation occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse.

2.3. Other hazards which do not result in classification

No additional information available.

2.4. Unknown acute toxicity (GHS US)

No additional information available.

SECTION 3: Composition/Information on ingredients

3.1. Substances

Mixture

3.2. Mixtures

Name	Chemical name	CAS #	%	GHS US classification
DAB Substrate Buffer	Imidazole	288-32-4	≤ 2	Acute Tox. 4 (Oral), H302 Skin Corr. 1C, H314
DAB Substrate Chromogen	3,3'-Diaminobenzidine tetrahydrochloride hydrate	868272-85-9	0.1 – 0.4	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Muta. 2, H341 Carc. 1B, H350
Poly HRP + AP Conjugate	Calcium chloride	10035-04-8	≤ 0.1	Eye Irrit. 2, H319
Link	sodium azide	26628-22-8	≤ 0.1	Acute Tox. 1 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 2 (Inhalation), H330 STOT RE 2, H373

Tissue-Tek Genie® DUO Mouse-DAB/Rabbit-AP Red Dual Detection Kit

Safety Data Sheet

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

Peroxidase Block	Hydrogen Peroxide	7722-84-1	1 – 4	Ox. Liq. 1, H271 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1A, H314 STOT SE 3, H335
Protein Block	hydrochloric acid, conc=30%, aqueous solution	7647-01-0	≤ 0.4	Met. Corr. 1, H290 Skin Corr. 1, H314 Eye Dam. 1, H318 STOT SE 3, H335

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 : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

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

Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : No fire hazard. No direct explosion hazard. Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

Tissue-Tek Genie® DUO Mouse-DAB/Rabbit-AP Red Dual Detection Kit

Safety Data Sheet

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

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.

Other information : Dispose of materials or solid residues at an authorized site.

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 : Not expected to present a significant hazard under anticipated conditions of normal use. Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a closed container. Keep in a cool, well-ventilated place away from heat. Keep cool. Protect from sunlight. Store at 2 - 8°C.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available.

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
Protective gloves.
Eye protection:
Safety glasses.
Skin and body protection:
Wear suitable protective clothing.
Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment.

Tissue-Tek Genie® DUO Mouse-DAB/Rabbit-AP Red Dual Detection Kit

Safety Data Sheet

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

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Various colours
Odor	: No data available
Odor threshold	: No data available
pH	: 2.5 – 8 (Varies depending on the KIT component)
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: Soluble in 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	: Not applicable
Explosive properties	: Not classified.
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Sunlight. Freezing.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Tissue-Tek Genie® DUO Mouse-DAB/Rabbit-AP Red Dual Detection Kit

Safety Data Sheet

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Causes skin irritation. pH: 2.5 – 8 (Varies depending on the KIT component)
Serious eye damage/irritation	: Causes serious eye damage. pH: 2.5 – 8 (Varies depending on the KIT component)
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: May cause cancer.
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects after inhalation	: Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.
Symptoms/effects after skin contact	: None under normal conditions.
Symptoms/effects after eye contact	: None under normal conditions.
Symptoms/effects after ingestion	: None under normal conditions.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
-------------------	--

12.2. Persistence and degradability

Not rapidly degradable

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	: Disposal must be done according to official regulations. Dispose of contents/container in accordance with licensed collector's sorting instructions. Disposal must be done according to official regulations. Do not re-use empty containers.
-------------------------	--

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

Tissue-Tek Genie® DUO Mouse-DAB/Rabbit-AP Red Dual Detection Kit

Safety Data Sheet

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

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

14.4. Packing group

Packing group (DOT) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT

Not applicable

IMDG

Not applicable

IATA

Not applicable

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

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Superfund Amendments and Reauthorization Act of 1986 (SARA)	
SARA 302 Extremely hazardous substance	Not chemicals in this material are subject to the reporting requirements.
SARA 311/312 Hazardous chemical	Hazards- No SARA Hazards
SARA 313 (TRI reporting)	This product does not contain any chemical components with known CAS numbers that exceed the threshold reporting levels.

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

Country(s) or Region	Inventory Name	On Inventory (Yes/No)*
Australia	Australian Inventory of Chemical Substances (AICS)	No data available
Canada	Domestic Substances List (DSL)	No data available

Tissue-Tek Genie® DUO Mouse-DAB/Rabbit-AP Red Dual Detection Kit

Safety Data Sheet

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

Canada	Non-Domestic Substances List (NDSL)	No data available
China	Inventory of Existing Chemical Substances in China (IECSC)	No data available
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No data available
Europe	European List of Notified Chemical Substances (ELINCS)	No data available
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No data available
Korea	Existing Chemicals List (ECL)	No data available
New Zealand	New Zealand Inventory	No data available
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No data available
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No data available

*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

California Proposition 65 –

This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

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.