



Safety data sheet

According to Regulation (EU) No 2015/830

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : TISSUE-TEK GENIE PRO DETECTION KIT, DAB DAB SUBSTRATE
Product code : 8826-K250_substrate

1.2. Relevant identified uses of the substance or mixture and uses advised against

Application : SU22 Professional use. For industrial or institutional use. PC21 Laboratory chemicals.

1.3. Details of the supplier of the safety data sheet

Supplier : Sakura Finetek Europe B.V.
Flemingweg 10A
2408 AV Alphen aan den Rijn, The Netherlands
Telephone : +31-88-5920000
E-mail : Application@sakura.eu
Website : www.sakura.eu

1.4. Emergency telephone number

EMERGENCY TELEPHONE NUMBER, for DOCTORS/FIRE BRIGADE/POLICE only:

NL - Telephone : +31-88-5920000 (During office hours only)

EMERGENCY TELEPHONE NUMBER (for DOCTORS only):

National Poisons Information Service +44 344 892 0111 (24/7)

SECTION 2 HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP classification : Carcinogenicity, hazard category 1B.
(1272/2008/EC)

Human health hazards : May cause cancer.

Physical/chemical hazards : Not classified as dangerous according to statutory EC-Directives.

Environmental hazards : Not classified as dangerous according to statutory EC-Directives.

2.2. Label elements

Label elements (1272/2008/EC):

Hazard pictograms :



Signal word : Danger

H- and P-phrases : H350 May cause cancer.
P201 Obtain special instructions before use.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P501 Dispose of contents/container to an official chemical waste depot.

Additional labelling (for all packaging sizes)

: Contains: 3,3-Diaminobenzidine tetrahydrochloride .



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2.3. Other hazards

Other information : Does not contain PBT or vPvB substances in concentrations higher than 0,1%.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

3.2. Mixtures

Product description : Mixture.

Information on hazardous substances:

Substance name	Concentration (w/w) (%)	CAS nr.	EC number	Remark	REACH nr.
3,3-Diaminobenzidine tetrahydrochloride	0,1 - < 1	868272-85-9	685-525-9		

Substance name	Hazard Class	H-phrases	Pictograms
3,3-Diaminobenzidine tetrahydrochloride	Acute Tox. 4; Eye Irrit. 2; Muta. 2; Carc. 1B	H302; H319; H341; H350	GHS07; GHS08

Reference is made to chapter 16 for full text of each relevant H phrase.

SECTION 4 FIRST-AID MEASURES

4.1. Description of first aid measures

First aid measures

- Inhalation : Move victim into fresh air. Consult a doctor if victim feels unwell.
- Skin contact : Take off contaminated clothing. Wash off skin with plenty of water and soap before product dries up.
- Eye contact : Wash out with (lukewarm) water. Remove contact lenses. Consult a doctor if irritation persists.
- Ingestion : Do not induce vomiting. Do rinse the mouth. Give one glass of water. Never give anything by mouth to an unconscious person. Consult a doctor if victim feels unwell.

4.2. Most important symptoms and effects, both acute and delayed

Effects and symptoms

- Inhalation : No specific effects and/or symptoms are known.
- Skin contact : No specific effects and/or symptoms are known.
- Eye contact : May cause stinging of eyes and redness.
- Ingestion : May cause a feeling of sickness, vomiting and diarrhoea.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians : None known.

SECTION 5 FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

- Suitable : Carbondioxide (CO₂). Foam. Dry chemical. Water fog.
- Not suitable : None known.

5.2. Special hazards arising from the substance or mixture

Special exposure hazards : None known.



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Hazardous thermal decomposition products : Carbon monoxide may be evolved if incomplete combustion occurs.

5.3. Advice for firefighters

Special protective equipment for fire-fighters : Use adequate respiratory equipment in case of insufficient ventilation.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Danger of slipping. Clean up spills immediately. Wear shoes with non-slip soles. Avoid contact with spilled or released material.

6.2. Environmental precautions

Environmental precautions : Avoid release of product into sewers, surface water and/or ground water. In case of large spills: contain with dike.

Other information : Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect spilled material in containers. Absorb residues in sand or other inert material. Dispose at an authorised waste collection point. Wash away remainder with plenty of water and soap.

6.4. Reference to other sections

Reference to other sections : See also section 8.

SECTION 7 HANDLING AND STORAGE

7.1. Precautions for safe handling

Handling : Handle in accordance with good occupational hygiene and safety practices in well-ventilated areas. Avoid contact with skin and eyes. Avoid splashing. Wear protective clothing.

7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep frost-free, in a cool, dry and well-ventilated place (< 35 °C). Keep away from food, drink and animal feedingstuffs.

Recommended packaging : Keep only in the original container.

Non recommended packaging : Steel (except stainless steel).

7.3. Specific end use(s)

Use : Use only as directed.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits : Occupational exposure limits have not been established for this product. Derived no-effect levels (DNEL) have not been established for this product. Predicted no-effect concentrations (PNEC) have not been established for this product.

8.2. Exposure controls



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- Engineering measures : Use only in well-ventilated areas. Comply with standard precautionary measures for working with chemicals. See Directive 2004/37/EG on the protection of workers from the risks related to exposure to carcinogens or mutagens at work.
- Hygienic measures : When using do not eat, drink or smoke.

Personal protective equipment:

The efficiency of personal protective equipment depends among other things on temperature and degree of ventilation. Always get professional advice for the particular local situation.



- Body protection : Wear appropriate protective clothing, overalls or suit, and similar boots in accordance with EN 365/367 resp. 345. Suitable material: nitril. Indication of permeation breakthrough time: not known.
- Respiratory protection : Take care of sufficient ventilation.
- Hand protection : Wear appropriate safety gloves in accordance with EN 374. Suitable material: nitril. $\pm 0,5$ mm. Indication of permeation breakthrough time: not known.
- Eye protection : Wear appropriate safety glasses when there is danger of possible eye contact.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

- Appearance : Liquid.
- Colour : Brown.
- Odour : Characteristic.
- Odour threshold : Not known.
- pH : 2,5 – 3,5
- Alkali reserve (g NaOH/100 ml) : Not known.
- Solubility in water : Soluble.
- Partition coefficient (n-octanol/water) : Not known. Not measured. Not relevant for mixtures.
- Flash point : Not applicable.
- Flammability (solid, gas) : Not applicable. Liquid.
- Auto ignition temperature : Not known. Does not contain substances with a known auto ignition temperature.
- Boiling point/boiling range : 90 – 100 °C
- Melting point/melting range : Not known.
- Explosive properties : None known. Does not contain explosives.
- Explosion limits (% in air) : Not applicable.
- Oxidising properties : Not applicable. Does not contain oxidizing substances.
- Decomposition temperature : Not known.
- Viscosity (20°C) : Not known.
- Viscosity (40°C) : Not relevant. The product contains < 10% substances having an aspiration hazard.
- Vapour pressure (20°C) : Not known.
- Vapour density (20°C) : Not relevant. The solvent content of this product is less than 1%.
- Relative density (20°C) : 1 g/ml
- Evaporation rate : Not known.

9.2. Other information

- Other information : Not relevant.

SECTION 10 STABILITY AND REACTIVITY



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10.1. Reactivity

Reactivity : See sub-sections below.

10.2. Chemical stability

Stability : Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reactivity : No other hazardous reactions known.

10.4. Conditions to avoid

Conditions to avoid : See section 7.

10.5. Incompatible materials

Materials to avoid : No specific recommendations.

10.6. Hazardous decomposition products

Hazardous decomposition products : Not known.

SECTION 11 TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

No toxicological research has been carried out on this product.

Inhalation

- Acute toxicity : Calculated LC50: no data mg/l. Ingredients of unknown toxicity: < 1 %. ATE: > 5 mg/l. Low toxicity. Not classified - based on available data, the classification criteria are not met. No specific effects and/or symptoms are known.
- Corrosion/irritation : No specific effects and/or symptoms are known. Not classified - based on available data, the classification criteria are not met.
- Sensitisation : Does not contain substances classified as respiratory sensitiser. Not classified - based on available data, the classification criteria are not met.
- Carcinogenicity : May cause cancer.
- Mutagenicity : Not expected to be mutagenic. Not classified - based on available data, the classification criteria are not met.

Skin contact

- Acute toxicity : Calculated LD50: > 5000 mg/kg.bw. Ingredients of unknown toxicity: < 1 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.
- Corrosion/irritation : No specific effects and/or symptoms are known. Not classified - based on available data, the classification criteria are not met.
- Sensitisation : Does not contain skin sensitisers. Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.

Eye contact

- Corrosion/irritation : Slight irritation possible. Not classified - based on available data, the classification criteria are not met.

Ingestion

- Acute toxicity : Calculated LD50: > 5000 mg/kg.bw. Ingredients of unknown toxicity: < 1 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.
- Aspiration : Not classified - based on available data, the classification criteria are not met. Does not contain substances with an aspiration hazard.



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- Corrosion/irritation : May cause a feeling of sickness, vomiting and diarrhoea.
Carcinogenicity : May cause cancer.
Mutagenicity : Not expected to be mutagenic. Not classified - based on available data, the classification criteria are not met.
Reprotoxicity : Development: Not expected to be reprotoxic. Development: Not classified - Based on available data, the classification criteria are not met. Fertility: not expected to be reprotoxic. Fertility: Not classified - based on available data, the classification criteria are not met.

Toxicological information:

Chemical name	Property		Method	Test animal
3,3-Diaminobenzidine tetrahydrochloride	LD50 (oral)	330 mg/kg bw		Mouse

SECTION 12 ECOLOGICAL INFORMATION

12.1. Toxicity

No ecotoxicological research has been carried out on this product.

Ecotoxicity : Not classified - based on available data, the classification criteria are not met.

12.2. Persistence and degradability

Persistence – degradability : No specific information known. The surfactants contained in this preparation do not comply with the biodegradability criteria as laid down in Regulation (EC) 648/2004 on detergents. This product shall not be used in cleaners.

12.3. Bioaccumulative potential

Bioaccumulative potential : No specific information known.

12.4. Mobility in soil

Mobility : If product enters soil, it will be highly mobile and may contaminate groundwater.

12.5. Results of PBT and vPvB assessment

PBT/vPvB assessment : Does not contain PBT or vPvB substances in concentrations higher than 0,1%.

12.6. Other adverse effects

Other information : Not applicable.

SECTION 13 DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product residues : Do not dispose empty pack with waste produced by households. Containers may be recycled. Treat product residues and non-empty pack as hazardous waste.

Additional warning : None.

Waste water discharge : Do not dispose into the environment, in drains or in water courses.

European waste catalogue : Dispose hazardous waste in accordance with Directive 91/689/EEC under acknowledgement of a waste code according to Commission Decision 2000/532/EC to an official chemical waste depot.

Local legislation : Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

SECTION 14 TRANSPORT INFORMATION



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14.1. UN number

UN nr. : None.

14.2. UN proper shipping name

Transport name : Not regulated.

14.3/14.4/14.5. Transport hazard class(es)/Packing group/Environmental hazards

ADR/RID/ADN (road/railway/inland waterways)

Class : This product is not classified according to ADR/RID/ADN.

IMDG (sea)

Class : This product is not classified according to IMDG.

Marine pollutant : No

IATA (air)

Class : This product is not classified according to IATA.

14.6. Special precautions for user

Other information : Country specific variations may apply.

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

Marpol : Not intended to be carried in bulk according to International Maritime Organisation (IMO) instruments. Packaged liquids are not considered bulk.

SECTION 15 REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Community regulations : Regulation (EU) No 2015/830 (REACH), Regulation (EC) No 1272/2008 (CLP) and other regulations.

15.2. Chemical safety assessment

Chemical safety assessment : Not applicable.

SECTION 16 OTHER INFORMATION

16.1. Other information

The information in this safety data sheet is compiled in compliance with Regulation (EU) No 2015/830 dated 28 May 2015 and accurate to the best of our knowledge and experience at the date of issue specified. It is the user's obligation to use this product safely and to comply with all applicable laws and regulations concerning the use of the product. This safety data sheet complements the technical information sheets but does not replace them and offers no warranty with regard to product properties.

Users are also forewarned for any hazards involved when the product is used for other purposes than those for which it is designed.

Changed or new information with regard to the previous release is indicated with an asterisk (*).

List of abbreviations and acronyms that could be (but not necessarily are) used in this safety data sheet:

ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE : Acute Toxicity Estimate
CLP : Classification, Labeling & Packaging
CMR : Carcinogenic, Mutagenic or toxic for Reproduction
EEC : European Economic Community



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GHS	: Globally Harmonized System of Classification and Labelling of Chemicals
IATA	: International Air Transport Association
IBC code	: International Bulk Chemical Code
IMDG	: International Maritime Dangerous Goods Code
LD50/LC50	: Lethal Dose/Concentration for 50% of a population
MAC	: Maximum Allowable Concentration
MARPOL	: International Convention for the Prevention of Pollution From Ships
NO(A)EL	: No Observed (Adverse) Effect Level
OECD	: Organisation for Economic Co-operation and Development
PBT	: Persistent, Bioaccumulative and Toxic
PC	: Chemical product category
PT	: Product type
REACH	: Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	: Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	: Sewage Treatment Plant
SU	: Sector of Use
TWA/STEL	: Time-Weighted Average/Short Term Exposure Limit
UN	: United Nations
VOC	: Volatile Organic Compounds
vPvB	: Very Persistent and Very Bioaccumulative

Key data used to compile the Safety Data Sheet are from, but not limited to, one or more sources of information e.g. toxicological data from material suppliers, CONCAWE, IFRA, CESIO, Regulation EG 1272/2008, etc.

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008:

Carc. 1B : Calculation method.

Full text of hazard classes mentioned in section 3:

Acute Tox. 4 : Acute toxicity, category 4.
Eye Irrit. 2 : Eye irritation, category 2.
Muta. 2 : Germ cell mutagenicity, Hazard Category 2.
Carc. 1B : Carcinogenicity, hazard category 1B.

Full text of H-phrases mentioned in section 3:

H302 Harmful if swallowed.
H319 Causes serious eye irritation.
H341 Suspected of causing genetic defects.
H350 May cause cancer.

Advice on any training appropriate for workers: none.

Number format : ", " used as decimal separator.

End of safety data sheet.