

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

1.1. Product identifier

Product name : TISSUE-TEK GENIE HEMATOXYLIN
Product code : 8830-M250

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)

SECTION 2 HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP classification : Skin irritation, category 2. Eye irritation, category 2.
(1272/2008/EC)

Human health hazards : Causes skin irritation. Causes serious eye irritation.
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 : Warning

H- and P-phrases : H315 Causes skin irritation.
H319 Causes serious eye irritation.
P280 hands Wear protective gloves and eye protection.
eyes
P337+P313 If eye irritation persists: Get medical advice/attention.

Labelling of packagings where the contents do not exceed 125 ml and it is technically impossible to list all phrases:

Hazard pictograms : 

Signal word : Warning

H- and P-phrases : None.

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. |
|---|-------------------------|-----------|-----------|--------|-----------|
| Sulfuric acid, aluminum ammonium salt, hydrate (2:1:1:12) | 5 - < 10 | 7784-26-1 | 616-522-2 | | |
| Chloral hydrate | 5 - < 10 | 302-17-0 | 206-117-5 | | |

| Substance name | Hazard Class | H-phrases | Pictograms |
|---|---|------------------|------------|
| Sulfuric acid, aluminum ammonium salt, hydrate (2:1:1:12) | Eye Irrit. 2; STOT SE 3; Skin Irrit. 2 | H315; H319; H335 | GHS07 |
| Chloral hydrate | Acute Tox. 3; Eye Irrit. 2; Skin Irrit. 2 | H301; H315; H319 | GHS06 |

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. Consult a doctor if irritation persists.
- Eye contact : Wash out with (lukewarm) water. Remove contact lenses. Consult a doctor.
- 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 : May cause headache, dizziness and a feeling of sickness.
- Skin contact : Irritant. May cause dry skin and redness.
- Eye contact : Irritant. May cause redness and pain.
- 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.
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. Vapours are heavier than air. Build up (of gasses) in low areas involves risk of suffocation.

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. Do not breathe vapour. 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 oxidizing agents.
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.

Derived no-effect level (DNEL) for workers:

| Chemical name | Route of exposure | DNEL, short-term | | DNEL, long-term | |
|-----------------|-------------------|------------------|-----------------|-----------------|-------------------------|
| | | Local effect | Systemic effect | Local effect | Systemic effect |
| Chloral hydrate | Inhalation | | | | 1,716 mg/m ³ |
| | Dermal | | | | 0,973 mg/kg bw/day |

Derived no-effect level (DNEL) for consumers:

| Chemical name | Route of exposure | DNEL, short-term | | DNEL, long-term | |
|-----------------|-------------------|------------------|-----------------|-----------------|-------------------------|
| | | Local effect | Systemic effect | Local effect | Systemic effect |
| Chloral hydrate | Inhalation | | | | 0,423 mg/m ³ |
| | Dermal | | | | 0,487 mg/kg bw/day |
| | Oral | | | | 0,243 mg/kg bw/day |

Predicted no-effect concentration (PNEC):

| Chemical name | Route of exposure | Fresh water | Marine water | |
|-----------------|-------------------|-------------|--------------|------------|
| Chloral hydrate | Water | 0,115 mg/l | 0,011 mg/l | |
| | Sediment | 0,09 mg/kg | 0,009 mg/kg | |
| | STP | | | 7,9 mg/l |
| | Soil | | | 0,02 mg/kg |

8.2. Exposure controls

Engineering measures : Use only in well-ventilated areas. Comply with standard precautionary measures for working with chemicals.
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 : Use of specific protective industrial clothing is not required for momentary use. Wear suitable protective clothing, overalls or suit, and similar boots in accordance with EN 365/367 resp. 345 in case of frequent or prolonged use and in case of large scale exposure. Suitable material: nitril. Indication of permeation breakthrough time: 6 hours.
- Respiratory protection : Take care of sufficient ventilation. Wear suitable respiratory protection in case of large scale exposure. Suitable: gas filter type A (brown), class I or higher on e.g. a facemask in accordance with EN 140.
- Hand protection : Wear appropriate safety gloves in accordance with EN 374. Suitable material: nitril. ± 0,5 mm. Indication of permeation breakthrough time: 6 hours.
- Eye protection : Wear appropriate safety glasses with side shields, in accordance with EN 166, 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 | : Red. | |
| Odour | : Characteristic. | |
| Odour threshold | : Not known. | |
| pH | : 2,4 | |
| 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 °C | |
| Melting point/melting range | : 0 °C | |
| 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) | : > 1 | (air = 1) |
| Relative density (20°C) | : 1 g/ml | |
| Evaporation rate | : Not known. | (n-butyl acetate = 1) |

9.2. Other information

Other information : Not relevant.

SECTION 10 STABILITY AND REACTIVITY

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 : Keep away from oxidizing agents.

10.6. Hazardous decomposition products

Hazardous decomposition products : HCl-gas and chlorine vapours.

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: 8 %. ATE: > 5 mg/l. Low toxicity. Not classified - based on available data, the classification criteria are not met. May cause headache, dizziness and a feeling of sickness.
- Corrosion/irritation : 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 : Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : 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 : Irritant. May cause redness. Prolonged contact may dry out and defat the skin.
- 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 : Irritant.

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.
- Corrosion/irritation : May cause a feeling of sickness, vomiting and diarrhoea.
- Carcinogenicity : Does not contain carcinogenic substances. 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.
- 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 |
|---|------------------------------|---------------------|-------------|------------------------|
| Sulfuric acid, aluminum ammonium salt, hydrate (2:1:1:12) | LD50 (dermal) - estimate | > 2000 mg/kg bw | Read across | ----- |
| | LC50 (inhalation) - estimate | > 5000 mg/m3 | Read across | ----- |
| Chloral hydrate | LD50 (oral) - estimate | > 2000 mg/kg bw | Read across | ----- |
| | LD50 (dermal) | 3030 mg/kg bw | | Rat |
| | LD50 (oral) | 479 mg/kg bw | | Rat |
| | Skin sensitisation | Not sensitizing | | Guinea pig |
| | Skin irritation | Moderately irritant | ----- | Guinea pig |
| | Eye irritation | Irritant | ----- | Rabbit |
| | Mutagenicity | Ambiguous | | Salmonella typhimurium |
| | NOAEL (oral) | 14,4 mg/kg bw/d | | Mouse |
| NOAEL (fertility, oral) | 55 mg/kg bw/d | | Rat | |

SECTION 12 ECOLOGICAL INFORMATION

12.1. Toxicity

No ecotoxicological research has been carried out on this product.



Ecotoxicity : Calculated LC50 (fish): 679 mg/l. Calculated EC50 (waterflea): 810 mg/l. Contains 0 % of components with unknown hazards to the aquatic environment. Not classified - based on available data, the classification criteria are not met.

12.2. Persistence and degradability

Persistence – degradability : No specific information known.

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

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 |
| 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 |

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

Skin Irrit. 2 : Calculation method.



Eye Irrit. 2 : Calculation method.

Full text of hazard classes mentioned in section 3:

Acute Tox. 3 : Acute toxicity, category 3.
Skin Irrit. 2 : Skin irritation, category 2.
Eye Irrit. 2 : Eye irritation, category 2.
STOT SE 3 : Specific target organ toxicity after single exposure, category 3.

Full text of H-phrases mentioned in section 3:

H301 Toxic if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Number format : "," used as decimal separator.

End of safety data sheet.