

Safety Data Sheet

According to (EC) No. 1907/2006

Day of issue: 18. August 2020

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Substrates

TMB SENS - Standard, Cat. No. 4850

TMB SENS - Prestained, Cat. No. 4860

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

For research and analysis. Restricted to professional users.

1.3. Details of the supplier of the safety data sheet

See below

Responsible person for the safety data sheet (e-mail): altox@altox.dk

1.4. Emergency telephone number

UK NHS: Dial 111 or 0845 4647

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

CLP (1272/2008): None

2.2. Label elements

None

2.3. Other hazards

None known

SECTION 3: Composition/information on ingredients

3.2. Mixtures

% w/w	Substance name	CAS-no.	EC-no.	Index-no.	REACH reg.-no.	Classification
<5	Citric acid Monohydrate	5949-29-1	201-069-1*	-	-	Eye Irrit. 2;H319

* EC-number corresponds to the CAS-number for the anhydrous compound.

Wording of hazard statements - see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation: Move the affected person to fresh air. Keep at rest. If needed: get medical attention.

Skin contact: Remove contaminated clothing and wash with soap and water. If irritation persists: Seek medical advice.

Eye contact: Flush with water or physiological salt water, holding eye lids open, remember to remove contact lenses, if any. If irritation persists: Seek medical advice.

Ingestion: Rinse mouth and drink plenty of water. Keep under surveillance. If needed: get medical attention.

SECTION 4: First aid measures (continued)**4.2. Most important symptoms and effects, both acute and delayed**

May cause slight irritation of skin, eyes and gastrointestinal tract.

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

Show this safety data sheet to a physician or emergency ward.

SECTION 5: Firefighting measures**5.1. Extinguishing media**

Not combustible; aqueous solution.

5.2. Special hazards arising from the substance or mixture

Not relevant (the product is not combustible).

5.3. Advice for firefighters

When extinguishing surrounding fires use breathing apparatus with an independent source of air.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment - see section 8.

6.2. Environmental precautions

Avoid empty into drains. If large amounts of the mixture contaminate sewages, inform appropriate authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

Absorb spilled liquid and place spillage in a plastic container. Further handling of spillage - see section 13.

6.4. Reference to other sections

See references above.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Avoid contact with skin, eyes and clothing.

7.2. Conditions for safe storage, including any incompatibilities

At 2-8°C. Keep container closed when not in use. Protected against light.

7.3. Specific end use(s)

See section 1.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

Occupational exposure limits (EH40/2018): None

DNEL/PNEC: No CSR.

8.2. Exposure controls

Appropriate engineering controls: None particular.

Personal protective equipment:

Inhalation: Not relevant during normal use.

Skin: In case of prolonged or repeated work: Wear protective gloves (EN374) e.g. of nitrile.

Breakthrough time: approximately 3 hours.

Eyes: Not relevant during normal use. Safety goggles (EN166) when there is risk of eye contact.

Environmental exposure controls: None particular.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Appearance:	Liquid
Odour:	None
Odour threshold:	Not relevant
pH:	No available data
Melting point / freezing point (°C):	No available data
Initial boiling point and boiling range (°C):	~ 100
Decomposition temperature (°C):	No available data
Flash point (°C):	Not relevant
Evaporation rate:	No available data
Flammability (solid, gas):	Not relevant
Upper/lower flammability or explosive limits (vol.-%):	Not relevant
Vapour pressure (hPa, 20°C):	~ 2.3
Vapour density (air=1):	~ 1
Relative density (g/cm ³):	~ 1
Solubility:	Completely soluble in water
Partition coefficient: n-octanol/water, Log K _{ow} :	No available data
Auto-ignition temperature (°C):	Not relevant
Viscosity:	No available data
Explosive properties:	Not relevant
Oxidising properties:	Not relevant

9.2. Other information

None relevant

SECTION 10: Stability and reactivity**10.1. Reactivity**

No available data.

10.2. Chemical stability

Stable under normal conditions - see section 7.

10.3. Possibility of hazardous reactions

None known

10.4. Conditions to avoid

Excessive heating and freezing

10.5. Incompatible materials

None known

10.6. Hazardous decomposition products

None known

SECTION 11: Toxicological information**11.1. Information on toxicological effects**

Hazard class	Data (Citric Acid)	Test	Data source
Acute toxicity:			
Inhalation	No available or applicable data.	-	-
Dermal	LD ₅₀ (rat) = >2000 mg/kg	OECD 402	ECHA
Oral	LD ₅₀ (mouse) = >5790 mg/kg	OECD 401	ECHA
Corrosion/irritation:	No skin or eye irritation, rabbit	OECD 404, 405	ECHA
Sensitization:	No available or applicable data.	-	-
CMR:	No mutagenic effects	OECD 475	ECHA

SECTION 11: Toxicological information (continued)

Information on likely routes of exposure: Skin and ingestion.

Symptoms:

Inhalation: Inhalation is unlikely when used as recommended.
 Skin: May cause slight irritation.
 Eyes: May cause slight irritation.
 Ingestion: May cause slight irritation of the gastrointestinal tract.
 Chronic effects: None known.

SECTION 12: Ecological information**12.1. Toxicity**

Aquatic	Data (Citric Acid)	Test (Media)	Data source
Fish	LC ₅₀ (Leuciscus idus melanotus, 96h) = 440 mg/l	OECD 203	ECHA
Crustacean	EC ₅₀ (Dreissena polymorpha, 48h) = >50 mg/l	OECD 202	ECHA
Algae	EC ₅₀ (Scenedesmus quadricauda) = 640 mg/l	No info	IUCLID

12.2. Persistence and degradability

Citric acid is readily biodegradable (97%, 28d, OECD 301B).

12.3. Bioaccumulative potential

Citric acid: Log Kow < 1 – Bioaccumulation not expected

12.4. Mobility in soil

No available or applicable data.

12.5. Results of PBT and vPvB assessment

No ingredients are PBT/vPvB, according to the criteria in REACH Annex XIII.

12.6. Other adverse effects

None known.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Disposal should be according to local, state or national legislation. Dispose of through authority facilities or pass to chemical disposal company.

EWC-code:

16 05 09 (mixture itself)

15 02 03 (Paper towel, inert material etc. contaminated with the mixture)

SECTION 14: Transport information

Not dangerous goods according to ADR/RID/IMDG/IATA

14.1. UN number None

14.2. UN proper shipping name None

14.3. Transport hazard class(es) None

14.4. Packing group None

14.5. Environmental hazards None

14.6. Special precautions for user None

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code Not relevant

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

None

15.2. Chemical safety assessment

No CSR

SECTION 16: Other information**Hazard statements mentioned in section 3:**

H319: Causes serious eye irritation

Abbreviations:

CMR = Carcinogenicity, mutagenicity and reproductive toxicity.

CSR = Chemical Safety Report

DNEL = Derived No-Effect Level

EC50 = Effect Concentration 50 %

FW = Fresh Water

LC₅₀ = Lethal Concentration 50 %

LD₅₀ = Lethal Dose 50 %

PBT = Persistent, Bioaccumulative, Toxic

PNEC = Predicted No-Effect Concentration

vPvB = very Persistent, very Bioaccumulative

Literature:

ECHA = European Chemicals Agency

IUCLID = International Uniform Chemical Information Database.

Training advice:

No special training is required. However, the user should be well instructed in the execution of his/her task, be familiar with this Safety Data Sheet and have normal training in the use of personal protective equipment.

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