

Material Safety Data Sheet according to 91/155/EEC

1. Product and Company Information

Product Name	TMB SOLUTION (VIII)
Product Number	TMB-P-003
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2. Composition/Information on ingredients

% w/w	Chemical Name	CAS no.	Classification
< 1	3,3',5,5'-Tetramethylbenzidin (TMB)	54827-17-7	Xn;R22 N;R51/53
> 98	Water	7732-18-5	-

3. Hazards identification

Particular information pertaining specific risk for human and environment

The health risk is low – see section 15.

4. First-aid measures

Eye contact

Flush thoroughly with water or physiological salt water. Remember to remove contact lenses. If irritation persists, seek medical advice.

Skin Contact

Remove contaminated clothing and wash with water and soap.

Inhalation

Go to fresh air. Keep at rest. If person feels queasy/discomfort, seek medical advice.

Ingestion

Rinse mouth and drink plenty of water. Keep under surveillance. If person feels queasy/discomfort, seek medical advice.

Information

Show this Safety Data Sheet to a physician or emergency ward.

5. Fire-fighting measures

Flammability

Not combustible; aqueous solution.

Extinguishing media – suitable

Use suitable extinguishing media for surrounding fire.

Extinguishing media – NOT suitable

-

Special risks in a fire situation

When heated to dryness the product may form hazardous decomposition products.

Protective equipment

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

Additional information

-

6. Accidental release measures

Personal precautions

Provide for sufficient ventilation/respiratory protection. See protective equipment listed in section 8.

Environment precautions

Do not empty into drains. If large amount of the product contaminates sewages, inform appropriate authorities in accordance with local regulations.

Methods for cleaning up/collecting

Absorb spilled liquid and place spillage in a plastic container.

7. Handling and storage

Safe handling

See section 8.

Safe storage

At 4°C. Keep container closed when not in use. Protect against light.

8. Exposure controls and personal protection

Engineering measures (prevention of worker exposure)

Avoid contact with skin and eyes.

Personal protective equipment

Eye protection: Wear safety goggles when at risk of splashes.

Skin protection: Wear plastic or rubber gloves

Respiratory protection: None.

9. Physical and chemical properties

Appearance:	Liquid
Odour:	-
Boiling point (°C):	Approximately 100
Flash point (°C):	-
Density (g/ml) at 20°C:	Approximately 1
Solubility in water:	Miscible

10. Stability and reactivity

Stability

-

Conditions to avoid

-

Materials to avoid

-

Hazardous decomposition products

When heated to dryness the product may form hazardous decomposition products.

11. Toxicology information

Routes of exposure:	May be absorbed through ingestion.
Acute toxicity:	
Eyes:	May cause irritation.
Skin:	May cause irritation
Inhalation:	Inhalation is not possible when used as recommended
Ingestion:	May cause irritation of the gastrointestinal tract.
Long term toxicity:	TMB has shown a possible mutagenic effect in experimental animals (mice).

12. Ecological information

Mobility:

-

Degradability:

TMB is not readily biodegradable

Accumulation:

The calculated log P_{ow} of TMB is 4.11 and TMB is therefore suspected to accumulate.

Short and long term effects:

TMB is toxic to aquatic organisms, and may cause long-term adverse effects in the aquatic environment.

Other adverse effects:

Use of the product can involve external environmental pollution. Do not empty into waters or drains.

13. Disposal considerations

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 03

14. Transport information

Road/Rail (ADR/RID)

Class:-

UN No.:-

Proper Shipping Name:-

Item No.:-

Letter:-

Sea (IMDG)

IMDG Class:-

UN No.:-

MFA G:-

Pack. Group:-

IMDG Page No.:-

MARPOL:-

EmS:-

Air (ICAO/IATA)

ICAO Class:-

ICAO UN No.:-

15. Regulatory information

Classification according to EEC directives

It has been evaluated that the preparation is not to be classified according to EEC directive 88/379/EEC.

Danger symbol and danger designation: None

Risk-phrases: -

Safety-phrases: -

EINECS no.: -

16. Other information

Use

For research and analysis (Immunoblotting).

Restriction on application

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Requirements concerning special training

No special training is anticipated; however, the user should be well instructed for the execution of his task, have knowledge of this Safety Data Sheet and normal training in the use of personal protective equipment.

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