

Material Safety Data Sheet (MSDS)

Prove-it™ Herpes Substrate

1. Identification of the reagent

Product name: Prove-it™ Herpes substrate

Catalogue number: SB01TA

o-Dianisidine/ Substrate solution, precipitating

2. Use of the reagent

This product is a substrate solution for use in Prove-it™ Herpes tests, based on the marker enzyme HRP for the colorimetric detection on TubeArrays.

Identification of the manufacturer:

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support@mobidiag.com

3. Emergency telephone

Tel: +358 9 19125036

Available only during office hours

4. Hazard identification

Although it is not classified as hazardous according to European Regulation 1999/45/EC the product should be handled with the usual care for all chemicals, in order to avoid synergistic effects.

Irritations of eyes or skin are possible.

5. Composition on ingredients

Chemical characterization of product composition: Aqueous solution of o-dianisidine, hydrogen peroxide, Tween 20 as detergent, citrate, EDTA, Kathon CG as preservative.

Dangerous components:

Component	EINECS	CAS-Nr	Percentage	Symbol	R-phrases
o-Dianisidine	204-355-4	119-90-4	0,0059	T _i	45-20/21/22-36/37/38
Citric acid monohydrate	201-069-1	5949-29-1	0,42	X _i	36
Ethylene diamine tetraacetate disodium salt	205-358-3	6381-92-6	0,093	-	-
5-Chlor-2-methyl-4-isothiazolin-3-one	247-500-7	26172-55-4	0,00009	T,N	23/24/25-34-43-50/53
2-Methyl-4-isothiazolin-3-one	220-239-6	2682-20-4	0,00003	T,N	23/24/25-34-43-50/53
Hydrogen peroxide	231-765-0	7722-84-1	< 0,002	C,O	34-8

The REACH register number is not available for any of the components

The full text of the R-phrases are in section 17.

6. First-aid measures

After contact with skin wash with water carefully.

After contact with the eyes rinse the opened eye carefully with running water for several minutes, consult a doctor.

After swallowing, rinse mouth and drink water, consult a doctor.

Contaminated clothing should be washed prior to next use.

7. Fire-fighting measures

The product itself is not inflammable, extinguishing measures should therefore be prepared for the environmental fire.

In case of fire toxic vapours can be released.

Wear breath protective mask and protective clothes if necessary during fire fighting.

8. Accidental release measures

Avoid contact with skin and eyes.

Dilute with plenty of water.

Ventilate and clean affected area very carefully after having completely disposed off the material.

9. Handling and storage

Handling

Special measures are not required.

Storage

At 2 – 8 °C in closed HDPE bottles. Protect from light.

10. Exposure controls and personal protection

Exposure limit values

Component	EINECS	Limit value according MAK (TRGS 900)
o-Dianisidine	204-355-4	0,03 mg/m ³
Ethylene diamine tetraacetate disodium salt	205-358-3	Not listed
5-Chlor-2-methyl-4-isothiazolin-3-one	247-500-7	0,05 mg/m ³
2-Methyl-4-isothiazolin-3-one	220-239-6	0,05 mg/m ³
Hydrogen peroxide	231-765-0	1,4 mg/m ³

By using the product according with the requirements, no air pollution is expected.

Exposure controls

Respiratory control: not required

Hand protection: Protective gloves of nitrilrubber or nature latex

Eye protection: Protective glasses

11. Physical and chemical properties

General data

Liquid product, slight foaming when shaken

Colour: Colourless to slightly yellow

Smell: Characteristic

Important data

pH-value: 4.2 -4.4

Boiling point: 102 °C

Flash point: not applicable

Explosive properties: non

Oxidising properties: non

Vapour pressure: not measured

Relative density: 1.012 g/ml

Solubility: complete soluble/ miscible in protic solvents

Water solubility: complete soluble/ miscible

Viscosity: not measured

Other information

No further dangerous properties known

12. Stability and reactivity

Conditions to avoid

Strong heat

Light, especially sunlight

- will not cause a dangerous reaction, but destroys the quality as substrate solution.

Materials to avoid

Heavy metal salts

Peroxidases and catalases

- will not cause a dangerous reaction, but destroys the quality as substrate solution.

Hazardous decomposition products

The finally decomposition product is the yellow Diammoniumion of Tetramethylbenzidin, a slightly watersluble biodegradable substance not classified as hazardous.

Note: contains preservatives as stated under issue number 3.

13. Toxicological information

Component	Valuation	Value	Species
o-Dianisidine	LD ₅₀ (oral)	1920 mg/kg	rat
Ethylene diamine tetra acetate disodium salt	LD ₅₀ (oral)	2000 mg/kg	rat
5-Chlor-2-methyl-4-isothiazolin-3-one	LD ₅₀ (oral)	3350 mg/kg	rat
2-Methyl-4-isothiazolin-3-one	LD ₅₀ (oral)	550 mg/kg	rat
Hydrogen peroxide	LD ₅₀ (oral) LD ₅₀ (dermal)	1232 mg/kg 3000 mg/kg	rat rabbit

Further toxicological information: Quantitative data concerning toxicity of the product do not exist.

14. Ecological information

Only relevant for the preservatives 5-chlor-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one

Ecotoxicity

Species	Valuation	Value
Trout	LC ₅₀ (mg/l)	0.19
Bass	LC ₅₀ (mg/l)	0.28
Marine algae (<i>Skeletonema costatum</i>)	EC ₅₀ (mg/l)	0.003
Algae (<i>Selenastrum capricornutum</i>)	EC ₅₀ (mg/l)	0.018
Invertebrates (<i>Daphnia magna</i>)	EC ₅₀ (mg/l)	0.16

Mobility

No data available

Persistence and degradability

Substance	T _{1/2} anaerob (h)
5-Chlor-2-methyl-4-isothiazolin-3-one	4,8
2-Methyl-4-isothiazolin-3-one	9,1

Bioaccumulative potential

Not investigated

Results of PBT assessment

Not investigated

Other adverse effects

No further effects known.

If used properly, no ecological problems are expected.

15. Disposal considerations

Product:

May not be discarded together with the normal waste. Chemicals or remaining residues have to be treated as special waste and should be discarded according to the appropriate legislation. Information can be collected from the responsible public authorities.

Packaging:

Disposal according to the instructions of the public authorities. Contaminated packages have to be treated like the substance itself. Packaging, that is not contaminated, can be recycled or treated like normal house garbage.

16. Transport information

The product is not subject to official transport regulations.

17. Regulatory information

Characterization according to the guidelines of the European Community:

Symbol: not applicable

Designation: not applicable

Water endangering class 1 (self-classification): low potential of water endangering

18. Additional comments

Fully text to the R-phrases mentioned in section 4.

R8	Contact with combustible material may cause fire.
R20/21/22 swallowed	Harmful by inhalation, in contact with skin and if swallowed
R23/24/25 swallowed	Toxic by inhalation, in contact with skin and if swallowed
R34	Causes burns
R36	Irritating to eyes
R36/37/38	Irritating to eyes, respiratory system and skin
R43	May cause sensitization by skin contact
R45	May cause heritable genetic damage
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

The information stated above is based on our actual knowledge and is intended to describe our products concerning safety recommendations. The information does not assure product properties and is therefore no basis for legal action.

The REACH registration numbers in section 4 are available after the beginning of the work of the REACH-agency in June 2008 till latest registration date June 2018.

19. References

Seramun Diagnostica GmbH: Material safety data sheet for o-Dianisidine/Substrate solution

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