

Safety Data Sheet

according to Regulation (EC) No 1907/2006

20x Wash Buffer TBS

Print date: 10.12.2013

Product code: WB-0005

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

1.1. Product identifier

20x Wash Buffer TBS

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

Use of the substance/mixture

The product is intended for professional use.

1.3. Details of the supplier of the safety data sheet

Company name:	ZytoVision GmbH	
Street:	Fischkai 1	
Place:	D-27572 Bremerhaven	
Telephone:	+49 (0) 471/4832-300	Telefax: +49 (0) 471/4832-509
e-mail:	info@zytovision.com	
Internet:	www.zytovision.com	

1.4. Emergency telephone number: +49 (0) 471/4832-300
9am - 5pm (CET)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Indications of danger: Xi - Irritant
R phrases:
Irritating to eyes, respiratory system and skin.
May cause sensitisation by skin contact.

GHS classification

Hazard categories:
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Irrit. 2
Respiratory/skin sensitization: Skin Sens. 1
Specific target organ toxicity - single exposure: STOT SE 3
Hazard Statements:
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
May cause respiratory irritation.

2.2. Label elements

Hazardous components which must be listed on the label

2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride
2-Amino-2-(hydroxymethyl)-1,3-propanediol (Trizma base)
Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

Signal word: Warning
Pictograms: GHS07



Hazard statements

H315 Causes skin irritation.

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- H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H335 May cause respiratory irritation.

Precautionary statements

- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 P271 Use only outdoors or in a well-ventilated area.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P302+P352 IF ON SKIN: Wash with plenty of soap and water.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P362 Take off contaminated clothing and wash before reuse.
 P363 Wash contaminated clothing before reuse.
 P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P312 Call a POISON CENTER or doctor/physician if you feel unwell.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P337+P313 If eye irritation persists: Get medical advice/attention.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.

2.3. Other hazards

No risks worthy of mention.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification	
Index No	GHS classification	
REACH No		
214-684-5	2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride	20 - 40 %
1185-53-1	Xi - Irritant R36/37/38	
	Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H315 H319 H335	
201-064-4	2-Amino-2-(hydroxymethyl)-1,3-propanediol (Trizma base)	< 20 %
77-86-1	Xi - Irritant R36/37/38	
	Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H315 H319 H335	
	Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	< 20 %
55965-84-9	T - Toxic, C - Corrosive, N - Dangerous for the environment R23/24/25-34-43-50-53	
613-167-00-5	Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, Skin Corr. 1B, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 1; H331 H311 H301 H314 H317 H400 H410	

Full text of R and H phrases: see Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated clothing immediately and dispose off safely. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). First aider: Pay attention to self-protection!

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After inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

After contact with skin

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Medical treatment necessary.

After contact with eyes

If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water.

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

No risks worthy of mention. Please observe the information on the safety data sheet at all times.

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

No special measures are necessary.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Extinguishing materials should be selected according to the surrounding area.

5.2. Special hazards arising from the substance or mixture

The product itself does not burn.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protective suit.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eye and clothing. Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

See chapter 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Further information on handling

Handle and open container with care.

7.2. Conditions for safe storage, including any incompatibilities

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Requirements for storage rooms and vessels

Keep container tightly closed.

Advice on storage compatibility

Keep only in the original container in a cool, well-ventilated place.

Further information on storage conditions

Store, tightly closed, in the original vessel at temperatures between 2°C and 8°C.

7.3. Specific end use(s)

The product is intended for professional use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional advice on limit values

Does not contain substances above concentration limits fixing an occupational exposure limit.

8.2. Exposure controls

Occupational exposure controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Protect skin by using skin protective cream. After work, wash hands and face. When using do not eat or drink.

Respiratory protection

Provide fresh air.

Hand protection

Wear suitable gloves.

Eye protection

Tightly sealed safety glasses.

Skin protection

Wear suitable protective clothing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	colourless
Odour:	odourless

Test method

pH-Value (at 20 °C):	not determined
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Changes in the physical state

Melting point:	not determined
Boiling point:	not determined
Sublimation point:	not determined
Softening point:	not determined
Flash point:	not determined

Flammability

Solid:	not determined
Gas:	not determined

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Explosive properties

not determined

Lower explosion limits:

not determined

Upper explosion limits:

not determined

Ignition temperature:

not determined

Auto-ignition temperature

Solid:

not determined

Gas:

not determined

Oxidizing properties

not determined

Vapour pressure:

not determined

Vapour pressure:

not determined

Density:

not determined

Bulk density:

not determined

Water solubility:

not determined

Solubility in other solvents

not determined

Partition coefficient:

not determined

Viscosity / dynamic:

not determined

Viscosity / kinematic:

not determined

Flow time:

not determined

Vapour density:

not determined

Evaporation rate:

not determined

Solvent separation test:

not determined

Solvent content:

not determined

9.2. Other information

Solid content:

not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

Product has not been tested.

10.2. Chemical stability

If stored correctly, the product is stable at least until the expiry date printed on the label.

10.3. Possibility of hazardous reactions

Product has not been tested.

10.4. Conditions to avoid

Product has not been tested.

10.5. Incompatible materials

Product has not been tested.

10.6. Hazardous decomposition products

Product has not been tested.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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Toxicokinetics, metabolism and distribution

Toxicological data are not available.

Acute toxicity

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
77-86-1	2-Amino-2-(hydroxymethyl)-1,3-propanediol (Trizma base)				
	oral	LD50	5900 mg/kg	Rat	
55965-84-9	Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)				
	oral	LD50	862 mg/kg	Rat	
	dermal	LD50	2800 mg/kg	Rabbit	
	inhalative vapour	ATE	3 mg/l		
	inhalative aerosol	ATE	0,5 mg/l		

Specific effects in experiment on an animal

Toxicological data are not available.

Irritation and corrosivity

Irritating to eyes. Following inhalation: Lung irritation. Coughing. Shortage of breath. After skin contact: Irritant.

Sensitising effects

May cause sensitization by skin contact.

Severe effects after repeated or prolonged exposure

Toxicological data are not available.

Carcinogenic/mutagenic/toxic effects for reproduction

Toxicological data are not available.

Additional information on tests

The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	h	Species	Source
1185-53-1	2-amino-2-(hydroxymethyl)propane-1,3-diolhydrochloride					
	Acute crustacea toxicity	EC50	>100 mg/l	48	Daphnia magna	OECD 202

12.2. Persistence and degradability

This information is not available.

12.3. Bioaccumulative potential

This information is not available.

12.4. Mobility in soil

This information is not available.

12.5. Results of PBT and vPvB assessment

Not applicable.

12.6. Other adverse effects

No data available.

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Further information

Do not allow to enter into surface water or drains. The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Dispose of waste according to applicable legislation.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

Other applicable information (land transport)

No dangerous good in sense of these transport regulations.

Inland waterways transport (ADN)

Other applicable information (inland waterways transport)

No dangerous good in sense of these transport regulations.

Marine transport (IMDG)

Other applicable information (marine transport)

No dangerous good in sense of these transport regulations.

Air transport (ICAO)

Other applicable information (air transport)

No dangerous good in sense of these transport regulations.

14.5. Environmental hazards

Dangerous for the environment: no

14.6. Special precautions for user

No dangerous good in sense of these transport regulations.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No dangerous good in sense of these transport regulations.

SECTION 15: Regulatory information

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

National regulatory information

Water contaminating class (D): 3 - highly water contaminating

SECTION 16: Other information

Full text of R phrases referred to under Sections 2 and 3

23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
34	Causes burns.
36/37/38	Irritating to eyes, respiratory system and skin.
43	May cause sensitisation by skin contact.
50	Very toxic to aquatic organisms.
53	May cause long-term adverse effects in the aquatic environment.

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Full text of H statements referred to under Sections 2 and 3

H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Further Information

Informations on working limitations:

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Further remarks:

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)