



Revision Date 17-Feb-2016

Revision Number 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier	
Product Name	TBS Buffer, 20X Liquid
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Other means of identification	
Product Code(s)	J640
Synonyms	No information available
Recommended use of the chemical	and restrictions on use
Recommended Use	For Further Manufacturing Use Only.
Uses advised against	Not for Human or Animal Drug Use
	5
Details of the supplier of the safety	data sheet
Company Address	Manufacturer Address
VWR International, LLC	VWR Chemicals, LLC
'_	
Radnor Corporate Center	28600 Fountain Parkway
Radnor Corporate Center 100 Matsonford Road	28600 Fountain Parkway Solon, Ohio 44139
•	5
100 Matsonford Road Radnor, PA 19087-8660	5
100 Matsonford Road	Solon, Ohio 44139
100 Matsonford Road Radnor, PA 19087-8660 Company Phone Number	Solon, Ohio 44139 1-800-448-4442
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2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

Label elements

Emergency Overview

Appearance Clear

Physical State Liquid

Odor No information available

Hazards not otherwise classified (HNOC) Not regulated Other Information • Causes mild skin irritation

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	EC No.	Weight %	Trade Secret
1,3-Propanediol,	1185-53-1	214-684-5	5-10	Not applicable
2-amino-2-(hydroxymethy				
l)-, hydrochloride				

4. FIRST AID MEASURES

First	Aid	Measures	

Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.		
Skin Contact	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.		
Inhalation	Move to fresh air. If not breathing, give artificial respiration.		
Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth.		
Most important symptoms and effects, both acute and delayed			
Most Important Symptoms/Effects No information available.			
Indication of any immediate medical attention and special treatment needed			
Notes to Physician	Treat symptomatically.		
5. FIRE-FIGHTING MEASURES			

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media No information available.

Specific Hazards Arising from the Chemical

No information available.

Explosion Data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal protection	Ensure adequate ventilation, especially in confined areas.		
Environmental Precautions			
Environmental Precautions	See Section 12 for additional Ecological information.		
Methods and material for containm	ent and cleaning up		
Methods for Containment	Prevent further leakage or spillage if safe to do so.		
Methods for Cleaning Up	Absorb with sand or vermiculite. Pick up and transfer to properly labeled containers. Ventilate area and wash spill site after material pickup is complete.		

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling

Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Products

Strong oxidizing agents. Strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
1,3-Propanediol,	-	-	-
2-amino-2-(hydroxymethyl)-,			
hydrochloride			
1185-53-1			

Appropriate engineering controls

Engineering Measures Showers Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Safety glasses with side-shields. Avoid contact with eyes.
Skin and Body Protection	Wear protective gloves/clothing.
Respiratory Protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Appearance Color	Liquid Clear No information available	Odor Odor Threshold	No information available No information available
Property	Values	Remarks • Method	
рН	No information available		
Melting point/freezing point			
Boiling Point/Range	No information available		
Flash Point (High in °C)	No information available		
Evaporation Rate	No information available		
Flammability (solid, gas)	No information available		
Flammability Limit in Air			
Upper flammability limit:	No information available		
Lower flammability limit:	No information available		
Vapor pressure	No information available		
Vapor Density	No information available		
Specific Gravity	No information available		
Water Solubility	No information available		
Solubility in other solvents	No information available		
Partition coefficient	No information available		

Autoignition Temperature Decomposition Temperature Kinematic viscosity Dynamic viscosity Explosive Properties Oxidizing Properties

Other Information

Softening Point Molecular Weight VOC Content Density Bulk Density No information available No information available

No information available No information available No information available No information available No information available

10. STABILITY AND REACTIVITY

Reactivity No data available

Chemical Stability
Stable under recommended storage conditions.
Possibility of Hazardous Reactions
None under normal processing.
Conditions to Avoid
Extremes of temperature and direct sunlight.
Incompatible Materials
Strong oxidizing agents. Strong acids.
Hazardous Decomposition Products
None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	
Inhalation	There is no data available for this product.
Eye Contact	There is no data available for this product.
Skin Contact	There is no data available for this product.
Ingestion	There is no data available for this product.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
1,3-Propanediol,	-	-	-
2-amino-2-(hydroxymethyl)-,			
hydrochloride			
1185-53-1			

Information on toxicological effects

Symptoms

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	No information	on available.		
Mutagenic Effects	No information	on available.		
Carcinogenicity	No information available.			
Chemical Name	ACGIH IARC		NTP	OSHA
1,3-Propanediol,	-	-	-	-

2-amino-2-(hydroxymethyl)-, hydrochloride 1185-53-1	
Reproductive Toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

12. ECOLOGICAL INFORMATION

Ecotoxicity

8.07% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Toxicity to Fish	Crustacea
1,3-Propanediol,	-	-	-
2-amino-2-(hydroxymethyl)-,			
hydrochloride			
1185-53-1			

Persistence and Degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Chemical Name	Partition coefficient
1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride	-
1185-53-1	

Other Adverse Effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Method

Dispose of material in accordance with all federal, state, and local regulations.

Contaminated Packaging

Do not re-use empty containers.

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride 1185-53-1	-	-	-	-

Chemical Name	California Hazardous Waste Status
1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride	-
1185-53-1	

14. TRANSPORT INFORMATION

DOT

Not regulated

IATA Not regulated

15. REGULATORY INFORMATION

International Inventories	
TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Does not Comply
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Component	SARA 313 - Threshold Values %
1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride	-
1185-53-1 (5-10)	

SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride 1185-53-1	-	-	-	-

<u>CERCLA</u>

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride 1185-53-1	-	-	-

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

Chemical Name	California Prop. 65
1,3-Propanediol, 2-amino-2-(hydroxymethyl)-, hydrochloride - 1185-53-1	-
U.S. State Right-to-Know Regulations	

Chemical Name	New Jersey	Massachusetts	Pennsylvania
1,3-Propanediol,	-	-	-
2-amino-2-(hydroxymethyl)-,			
hydrochloride			
1185-53-1			

U.S. EPA Label Information EPA Pesticide Registration Number Not regulated

16. OTHER INFORMATION

25-Jun-2009 17-Feb-2016

Issuing Date
Revision Date
Revision Note
No information available
<u>Disclaimer</u>

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. VWR International and its Affiliates shall not be held liable for any damage resulting from handling.

End of Safety Data Sheet