SAFETY DATA SHEET

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

1.1 Product identifiers

Product name	Toluidine Blue Penetrant Solution
CAS number	See Section 3
Synonyms	No information available

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

Identified uses	Laboratory Chemicals

1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
This product is not categorized as hazardous in any GHS hazard class.

2.2 GHS Label elements, including precautionary statements

None required.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Data not available.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Water	H2O; Aqua	7732-18-5	99.46%
Triton® X-100	-	9002-93-1	0.50%
Toluidine Blue O	-	92-31-9	<0.1%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled Not expected to require first aid. If necessary, remove to fresh air.

In case of skin contact May cause slight irritation.

In case of eye May cause irritation, redness, pain, and tearing.

If swallowed Dilute with water or milk. Call a physician if necessary.

4.2 Most important symptoms and effects, both acute and delayed

CAUTION! May be harmful if swallowed. If ingested, give large quantity of water. Call a physician if necessary. Wash areas of contact with plenty of water. For eyes, get medical attention. EYE CONTACT: May cause irritation, redness, pain, and tearing. SKIN CONTACT: May cause slight irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops. Not expected to require first aid measures. Flush with plenty of water for at least 15 minutes. Call a physician if irritation develops. Dilute with water or milk. Call a physician if necessary.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Use any means suitable for extinguishing surrounding fire.

Unsuitable extinguishing media No information available.

5.2 Specific hazards arising from the substance or mixture

Not considered to be a fire or explosion hazard.

5.3 Special protective equipment and precautions for firefighters
Use protective clothing and breathing equipment appropriate for the surrounding fire.

5.4 Further information

Flash Point No information available.

Autoignition Temperature No information available.

Explosion limits

Upper No data available.
Lower No data available.

Sensitivity to Mechanical Impact No information available.
Sensitivity to Static Discharge No information available.

NFPA

Health	Flammability	Instability	Physical hazards
1	0	0	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear appropriate PPE for the size and nature of the spill. As a general rule, wear safety glasses and gloves.

6.2 Environmental precautions
No information available.

6.3 Methods and materials for containment and cleaning up
Absorb with suitable material and dispose of in accordance with local regulations.

6.4 Reference to other sections
See Section 2 for full list of hazard and precaution statements.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions on safe handling
As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin.

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Protect from freezing and physical damage.

Incompatibilities
Strong oxidizing agents, reducing agents, strong acids.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits
Data not available.

8.2 Exposure controls

Appropriate engineering controls
No specific controls are needed. Normal room ventilation is adequate.

Personal protective equipment

Eye/face protection
Safety glasses or goggles.

Skin protection
Chemical resistant gloves.

Body Protection
Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory protection
Normal room ventilation is adequate.

Control of environmental exposure
No information available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Blue-purple
Odor	Data not available
Odor Threshold	Data not available
pH	Data not available
Melting Point/Range	0.0°C
Boiling Point/Range	100°C
Evaporation Rate	Data not available
Flammability (solid)	Data not available
Flammability or explosive limit	Data not available

Upper	
Lower	
Vapor Pressure	Data not available
Vapor Density	Data not available
Density	1.01
Solubility	Miscible
Partition coefficient; n-octanol/water	Data not available
Autoignition Temp	Data not available
Decomposition Temp	Data not available
Viscosity	Data not available
Molecular Formula	No information available
Molecular Weight	No information available
VOC Content(%)	Data not available
Oxidizing properties	Data not available

9.2 Other safety information No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity
No information available.

10.2 Chemical stability
Stable under normal conditions of use and storage.

10.3 Possibility of hazardous reactions
Data not available.

10.4 Conditions to avoid
Incompatible materials.

10.5 Incompatible materials
Strong oxidizing agents, reducing agents, strong acids.

10.6 Hazardous decomposition products
Will not occur.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Triton® X-100	1800 mg/kg (Rat)	-	-

Skin corrosion/irritation
Not applicable.

Serious eye damage/eye irritation
Not applicable.

Respiratory or skin sensitization
Not applicable.

Germ cell mutagenicity
Not applicable.

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed
Triton® X-100	9002-93-1	Not listed	Not listed	Not listed	Not listed	Not listed
Toluidine Blue O	92-31-9	Not listed	Not listed	Not listed	Not listed	Not listed

Specific target organ toxicity - single exposure
Not applicable.

Specific target organ toxicity - repeated exposure
Not applicable.

Reproductive toxicity
Not applicable.

Chronic effects
Not applicable.

11.2 Additional Information
Data not available.

SECTION 12: Ecological information

12.1 Toxicity
Not applicable.

12.2 Persistence and degradability
Data not available.

12.3 Bio accumulative potential
Data not available.

12.4 Mobility in soil
Data not available.

12.5 Results of PBT and vPvB assessment
Data not available.

12.6 Endocrine disrupting properties
Triton® X-100 (CAS #9002-93-1) is listed as a Group III Chemical on the EU - Endocrine Disrupters Candidate List.

12.7 Other adverse effects
Data not available.

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT (US) Not regulated.

IMDG Not regulated.

IATA Not regulated.

SECTION 15: Regulatory information

US federal regulations This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not applicable.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

SARA 304 Emergency release notification
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)
Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous

See Section 2 for more information.

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Not listed.

US state regulations

US. Massachusetts RTK - Substance List

Not listed.

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

California Proposition 65

Not listed.

SECTION 16: Other information

Issue Date: 04/19/2017
Revision Date: 11/17/2026

SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.