



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 as amended by Regulation (EU) No. 2020/878, and
Regulation (EC) No. 1272/2008

Revision date 05-Feb-2026

Version 1

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

1.1. Product identifier

Product No T3014
Product name Monarch® gDNA binding buffer

Other means of identification

Pure substance/mixture Mixture

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

Recommended use This product is for research and development only
Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Supplier Address

New England BioLabs
240 County Road
Ipswich, MA 01938
USA

For further information, please contact

Company Phone Number 978-927-5054, 800-632-5227 (toll free)
Telefax 978-921-1350
E-mail address info@neb.com

1.4. Emergency telephone number

24 Hour Emergency Phone Number Chemtrec +44 20 3885 0382

Europe	+1 978-380-2125
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids	Category 3 - (H226)
Acute toxicity - Oral	Category 4 - (H302) - (H315) - (H319)
Hazardous to the aquatic environment - chronic	Category 3 - (H412)

2.2. Label elements



Signal word

Warning

Hazard statements

H226 - Flammable liquid and vapor

H302 - Harmful if swallowed

H412 - Harmful to aquatic life with long lasting effects

H313 - May be harmful in contact with skin

H319 - Causes serious eye irritation

Precautionary Statements - EU (§28, 1272/2008)

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P260 - Do not breathe dust, fume, gas, mist, vapors and spray.

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a POISON CENTER or doctor.

P331 - Do NOT induce vomiting.

P370 + P378 - In case of fire: Use dry chemical, CO₂, water spray or alcohol-resistant foam to extinguish.

P403 + P235 - Store in a well-ventilated place. Keep cool.

Unknown aquatic toxicity

Contains 0 % of components with unknown hazards to the aquatic environment.

Additional information

This product requires child resistant fastenings if supplied to the general public. This product requires tactile warnings if supplied to the general public.

2.3. Other hazards

No information available.

PBT or vPvB properties

No information available.

Endocrine Disruptor Information

Contains a known or suspected endocrine disruptor.

Chemical name	EU - REACH (1907/2006) - Article 59(1) - Candidate List of Substances of Very High Concern (SVHC) for	EU - REACH (1907/2006) - Endocrine Disruptor Assessment List of Substances	Endocrine disrupting properties in accordance with the criteria set out in Commission Delegated
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	Authorisation		Regulation (EU) 2017/2100(3) or Commission Regulation (EU) 2018/605(4)
Triton X-100	Endocrine disrupting properties	-	Endocrine disrupting properties

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	Weight-%	REACH registration number	EC No. (Index No.)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)	Notes
Guanidine Thiocyanate 593-84-0	30 - 60	No data available	209-812-1	Acute Tox. 4 (H302) Aquatic Chronic 3 (H412) Eye Irrit. 2 (H319)	-	-	-	-
Trade Secret	5 - 10	No data available	.?	Eye Irrit. 2 (H319) Flam. Liq. 2 (H225)	-	-	-	-
Triton X-100 9002-93-1	1 - 5	No data available	-	No data available	-	-	-	-

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapor - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Trade Secret	1870	4059	No data available	30.1002	No data available
Triton X-100 9002-93-1	1800	No data available	No data available	No data available	No data available

This product contains one or more candidate substance(s) of very high concern (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Chemical name	CAS No.	SVHC candidates
Triton X-100	9002-93-1	X

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	IF exposed or concerned: Get medical advice/attention. If symptoms persist, call a physician.
Inhalation	If symptoms persist, call a physician. Remove to fresh air.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms persist, call a physician.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.
Ingestion	Do NOT induce vomiting. Clean mouth with water. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
Self-protection of the first aider	Remove all sources of ignition. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

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

Symptoms	Prolonged contact may cause redness and irritation. Vapors may cause drowsiness and dizziness.
Effects of Exposure	None.

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

Note to physicians	Treat symptomatically.
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SECTION 5: Firefighting measures**5.1. Extinguishing media**

Suitable Extinguishing Media	Dry chemical. Carbon dioxide (CO ₂). Water spray. Alcohol resistant foam.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.
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5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
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SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Personal precautions	Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate
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ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Attention! Corrosive material.

Other information Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Should not be released into the environment. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Use personal protection equipment. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

General hygiene considerations Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Keep out of the reach of children.

Protect from moisture. Store locked up. Store away from other materials.

Storage class (TRGS 510)

Storage class 3.

7.3. Specific end use(s)

Risk management methods [RMM] The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	Austria	Belgium	Bulgaria	Croatia
Trade Secret	TWA: 200 ppm TWA: 500 mg/m ³ STEL 800 ppm STEL 2000 mg/m ³	TWA: 200 ppm TWA: 500 mg/m ³ STEL: 400 ppm STEL: 1000 mg/m ³	TWA: 980.0 mg/m ³ STEL: 1225.0 mg/m ³	TWA: 400 ppm TWA: 999 mg/m ³ STEL: 500 ppm STEL: 1250 mg/m ³
Chemical name	Cyprus	Czech Republic	Denmark	Estonia
Trade Secret	-	TWA: 500 mg/m ³ Sk* Ceiling: 1000 mg/m ³	TWA: 200 ppm TWA: 490 mg/m ³ STEL: 400 ppm STEL: 980 mg/m ³	TWA: 150 ppm TWA: 350 mg/m ³ STEL: 250 ppm STEL: 600 mg/m ³
Chemical name	Finland	France	Germany TRGS	Germany DFG
Trade Secret	TWA: 200 ppm TWA: 500 mg/m ³ STEL: 250 ppm STEL: 620 mg/m ³	STEL: 400 ppm STEL: 980 mg/m ³	TWA: 200 ppm TWA: 500 mg/m ³	TWA: 200 ppm TWA: 500 mg/m ³ Peak: 400 ppm Peak: 1000 mg/m ³
Chemical name	Greece	Hungary	Italy MDLPS	Italy AIDII
Trade Secret	TWA: 400 ppm TWA: 980 mg/m ³ STEL: 500 ppm STEL: 1225 mg/m ³	TWA: 500 mg/m ³ TWA: 200 ppm STEL: 1000 mg/m ³ STEL: 400 ppm Sk*	-	TWA: 200 ppm TWA: 492 mg/m ³ STEL: 400 ppm STEL: 983 mg/m ³
Chemical name	Ireland	Latvia	Lithuania	Luxembourg
Trade Secret	TWA: 200 ppm STEL: 400 ppm Sk*	TWA: 350 mg/m ³ STEL: 600 mg/m ³	TWA: 150 ppm TWA: 350 mg/m ³ STEL: 250 ppm STEL: 600 mg/m ³	-
Chemical name	Malta	Netherlands	Norway	Poland
Trade Secret	-	-	TWA: 100 ppm TWA: 245 mg/m ³ STEL: 150 ppm STEL: 306.25 mg/m ³	TWA: 900 mg/m ³ STEL: 1200 mg/m ³ Sk*
Chemical name	Portugal	Romania	Slovakia	Slovenia
Trade Secret	TWA: 200 ppm STEL: 400 ppm	TWA: 81 ppm TWA: 200 mg/m ³ STEL: 203 ppm STEL: 500 mg/m ³	TWA: 200 ppm TWA: 500 mg/m ³ Ceiling: 1000 mg/m ³	TWA: 200 ppm TWA: 500 mg/m ³ STEL: 400 ppm STEL: 1000 mg/m ³
Chemical name	Spain	Sweden	Switzerland	United Kingdom
Trade Secret	TWA: 200 ppm TWA: 500 mg/m ³ STEL: 400 ppm STEL: 1000 mg/m ³	NGV: 150 ppm NGV: 350 mg/m ³ Vägledande KGV: 250 ppm Vägledande KGV: 600 mg/m ³	TWA: 200 ppm TWA: 500 mg/m ³ STEL: 400 ppm STEL: 1000 mg/m ³	TWA: 400 ppm TWA: 999 mg/m ³ STEL: 500 ppm STEL: 1250 mg/m ³
Chemical name	Sweden		Switzerland	United Kingdom

Trade Secret	NGV: 150 ppm NGV: 350 mg/m ³ Vägledande KGV: 250 ppm Vägledande KGV: 600 mg/m ³	TWA: 200 ppm TWA: 500 mg/m ³ STEL: 400 ppm STEL: 1000 mg/m ³	TWA: 400 ppm TWA: 999 mg/m ³ STEL: 500 ppm STEL: 1250 mg/m ³
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Biological occupational exposure limits

Chemical name	European Union	Austria	Bulgaria	Croatia	Czech Republic
Trade Secret	-	-	-	50 mg/L - blood (Acetone) - at the end of the work shift 50 mg/L - urine (Acetone) - at the end of the work shift	-
Chemical name	Denmark	Finland	France	Germany DFG	Germany TRGS
Trade Secret	-	-	-	25 mg/L (whole blood - Acetone end of shift) 25 mg/L (urine - Acetone end of shift) 25 mg/L - BAT (end of exposure or end of shift) urine 25 mg/L - BAT (end of exposure or end of shift) blood	25 mg/L (whole blood - Acetone end of shift) 25 mg/L (urine - Acetone end of shift)
Chemical name	Hungary	Ireland	Italy MDLPS	Italy AIDII	
Trade Secret	-	40 mg/L (urine - Acetone end of shift at end of workweek)	-	40 mg/L - urine (Acetone) - end of shift at end of workweek	
Chemical name	Latvia	Luxembourg	Romania	Slovakia	
Trade Secret	-	-	50 mg/L - urine (Acetone) - end of shift	-	
Chemical name	Slovenia	Spain	Switzerland	United Kingdom	
Trade Secret	25 mg/L - blood (Acetone) - at the end of the work shift 25 mg/L - urine (Acetone) - at the end of the work shift	40 mg/L (urine - Acetone end of workweek)	25 mg/L (urine - Acetone end of shift) 0.4 mmol/L (urine - Acetone end of shift) 25 mg/L (whole blood - Acetone end of shift) 0.4 mmol/L (whole blood - Acetone end of shift)	-	

Derived No Effect Level (DNEL) - Workers

Chemical name	Oral	Dermal	Inhalation
Guanidine Thiocyanate 593-84-0	-	0.31 mg/kg bw/day [4] [6]	1.092 mg/m ³ [4] [6] 3.28 mg/m ³ [4] [7]
Trade Secret	-	888 mg/kg bw/day [4] [6]	500 mg/m ³ [4] [6]
Tris (Tris Base) 77-86-1	-	166.7 mg/kg bw/day [4] [6]	117.5 mg/m ³ [4] [6]

Notes

[4]	Systemic health effects.
[6]	Long term.
[7]	Short term.

Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
Guanidine Thiocyanate 593-84-0	0.155 mg/kg bw/day [4] [6]	-	0.27 mg/m ³ [4] [6]
Trade Secret	26 mg/kg bw/day [4] [6]	-	89 mg/m ³ [4] [6]
Tris (Tris Base) 77-86-1	8.3 mg/kg bw/day [4] [6]	-	29 mg/m ³ [4] [6]

Notes

[4] Systemic health effects.
[6] Long term.

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
Guanidine Thiocyanate 593-84-0	42.4 µg/L	424 µg/L	4.24 µg/L	424 µg/L	-
Trade Secret	140.9 mg/L	140.9 mg/L	140.9 mg/L	-	-

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
Guanidine Thiocyanate 593-84-0	165 µg/kg sediment dw	16.5 µg/kg sediment dw	20 mg/L	8.03 µg/kg soil dw	-
Trade Secret	552 mg/kg sediment dw	552 mg/kg sediment dw	2251 mg/L	28 mg/kg soil dw	160 mg/kg food
Tris (Tris Base) 77-86-1	-	-	300 mg/L	-	-

8.2. Exposure controls

Engineering controls No information available.

**Individual protection measures,
such as personal protective
equipment**

Eye/face protection Tight sealing safety goggles. Face protection shield.

Hand protection Wear suitable gloves. Impervious gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Clear
Physical state	Liquid
Color	No information available
Odor	None
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point	No data available	None known
Boiling point or initial boiling point and boiling range	No data available	None known
Flammability (solid, gas)	No data available	None known
Lower and upper explosion limit/flammability limit		None known
Lower explosion limit	No data available	
Upper explosion limit	No data available	
Flash point	> 41 °C	
Autoignition temperature	399 °C	
Decomposition temperature		None known
SADT (°C)	No data available	None known
pH	8	
pH (as aqueous solution)	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Solubility	No data available	None known
Water solubility	No data available	None known
Partition coefficient n-octanol/water (log value)	No data available	None known
Vapor pressure	No data available	None known
Density and/or relative density	No data available	None known
Bulk density	No data available	
Liquid Density	No data available	
Vapor density	No data available	None known
Particle characteristics		
Particle Size	No information available	
Particle Size Distribution	No information available	

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No information available

9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge Yes.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Heat, flames and sparks. Exposure to air or moisture over prolonged periods.

10.5. Incompatible materials

Incompatible materials Acids. Bases. Oxidizing agent.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available. Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing.
Eye contact	Specific test data for the substance or mixture is not available. Causes serious eye irritation.
Skin contact	Specific test data for the substance or mixture is not available. May cause irritation.
Ingestion	Specific test data for the substance or mixture is not available. May cause drowsiness or dizziness.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Prolonged contact may cause redness and irritation. Vapors may cause drowsiness and dizziness.

Acute toxicity Harmful if swallowed.

Numerical measures of toxicity

The following ATE values have been calculated for the mixture

ATE_{mix} (oral)	1,144.60 mg/kg
ATE_{mix} (dermal)	31,173.10 mg/kg
ATE_{mix} (inhalation-gas)	99,999.00 ppm
ATE_{mix} (inhalation-vapor)	231.20 mg/L
ATE_{mix} (inhalation-dust/mist)	99,999.00 mg/L

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Trade Secret	= 1870 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	> 10000 ppm (Rat) 6 h
Triton X-100	= 1800 mg/kg (Rat)	-	-

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

Skin corrosion/irritation	May cause skin irritation.
Serious eye damage/eye irritation	Causes serious eye damage. Causes burns. Classification based on data available for ingredients.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

11.2. Information on other hazards**11.2.1. Endocrine disrupting properties**

Endocrine disrupting properties	No information available.
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11.2.2. Other information

Other adverse effects	No information available.
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SECTION 12: Ecological information

<u>12.1. Toxicity</u>	Contains 0 % of components with unknown hazards to the aquatic environment. Harmful to aquatic life with long lasting effects.
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Chemical name	Fish	Crustacea	Algae/aquatic plants	Toxicity to microorganisms
Trade Secret	LC50: =9640mg/L (96h,	EC50: =13299mg/L	EC50: >1000mg/L (96h,	-

	Pimephales promelas) LC50: =11130mg/L (96h, Pimephales promelas) LC50: >1400000µg/L (96h, Lepomis macrochirus)	(48h, Daphnia magna)	Desmodesmus subspicatus) EC50: >1000mg/L (72h, Desmodesmus subspicatus)	
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12.2. Persistence and degradability No information available.

12.3. Bioaccumulative potential

Chemical name	Partition coefficient	Bioconcentration factor (BCF)	Trophic magnification factor (TMF)
Trade Secret	0.05	-	-

12.4. Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment No information available.

Chemical name	PBT and vPvB assessment
Guanidine Thiocyanate	Not PBT/vPvB
Trade Secret	Not PBT/vPvB

12.6. Endocrine disrupting properties Based on available data, the classification criteria are not met.

Chemical name	Endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100(3) or Commission Regulation (EU) 2018/605(4)
Triton X-100	Environmental effects

12.7. Other adverse effects No information available.

PMT or vPvM properties Based on available data, the classification criteria are not met.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

SECTION 14: Transport information

IATA

14.1 UN number or ID number	Not regulated
14.2	
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special precautions for user	
Special Provisions	None

IMDG

14.1 UN number or ID number	Not regulated
14.2	
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special precautions for user	
Special Provisions	None
14.7 Maritime transport in bulk according to IMO instruments	No information available

RID

14.1 UN number or ID number	Not regulated
14.2	
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special precautions for user	
Special Provisions	None

ADR

14.1 UN number or ID number	Not regulated
14.2	
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special precautions for user	
Special Provisions	None

ADN

14.1	
14.2	
14.3 Transport hazard class(es)	Not regulated
14.4	
14.5	
14.6 Special precautions for user	

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****France****Occupational Illnesses (R-463-3, France)**

Chemical name	French RG number
Trade Secret	RG 84

Chemical Prohibition Ordinance (ChemVerbotsV)

Not applicable.

TRGS 905

Not applicable

Ordinance on the Incentive Tax on Volatile Organic Compounds (OVOC) SR 814.018 Not applicable
 Storage of Hazardous Material Not applicable
 WPO (GSchV) SR 814.201; WPA (GSchG) SR 814.20 Not applicable
 Major Accidents Ordinance SR 814.012 Not applicable

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorizations and/or restrictions on use:

This product contains one or more substance(s) subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorization per REACH Annex XIV
Triton X-100 9002-93-1	-	42

Persistent Organic Pollutants

Not applicable

Dangerous substance category per Seveso Directive (2012/18/EU)

P5a - FLAMMABLE LIQUIDS

P5b - FLAMMABLE LIQUIDS

P5c - FLAMMABLE LIQUIDS

Ozone-depleting substances (ODS) Regulation (EU) 2024/590

Not applicable.

Biocidal Products Regulation (EU) No 528/2012 (BPR)

Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)
Trade Secret	Product-type 2: Disinfectants and algacides not intended for direct application to humans or animals Product-type 4: Food and feed area Product-type 1: Human hygiene

Explosives Precursors Marketing and Use (2019/1148)

Not applicable.

International Inventories

TSCA

Contact supplier for inventory compliance status

DSL/NDL

Contact supplier for inventory compliance status

EINECS/ELINCS

Contact supplier for inventory compliance status

ENCS

Contact supplier for inventory compliance status

IECSC

Contact supplier for inventory compliance status

KECL

Contact supplier for inventory compliance status

PICCS

Contact supplier for inventory compliance status

AIIC

Contact supplier for inventory compliance status

NZIoC

Contact supplier for inventory compliance status

TCSI

Contact supplier for inventory compliance status

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 Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing Chemicals Inventory
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals
TCSI - Taiwan Chemical Substance Inventory

15.2. Chemical safety assessment**Chemical Safety Report**

No information available

SECTION 16: Other information**Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of any hazard and/or precautionary statements referred to under Sections 2-15**

H225 - Highly flammable liquid and vapor
H302 - Harmful if swallowed
H319 - Causes serious eye irritation
H412 - Harmful to aquatic life with long lasting effects
P264 - Wash face, hands and any exposed skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
P330 - Rinse mouth
P501 - Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable
P260 - Do not breathe dust, fume, gas, mist, vapors and spray
P280 - Wear protective gloves, protective clothing, eye protection and face protection
P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER or doctor
P321 - Specific treatment (see supplemental first aid instructions on this label)
P363 - Wash contaminated clothing before reuse
P405 - Store locked up
P273 - Avoid release to the environment
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P233 - Keep container tightly closed
P240 - Ground and bond container and receiving equipment
P241 - Use explosion-proof electrical, ventilating and lighting equipment
P242 - Use non-sparking tools
P243 - Take action to prevent static discharges
P370 + P378 - In case of fire: Use .? to extinguish
P403 + P235 - Store in a well-ventilated place. Keep cool
P501 - Dispose of contents/container to industrial incineration plant

Key or legend to abbreviations and acronyms used in the safety data sheet*List may include phrases which are not applicable to this product*

ACGIH	American Conference of Governmental Industrial Hygienists
AIDII	Italian Association of Industrial Hygienists

ADN	Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Europe)
ADR	Agreement concerning the International Carriage of Dangerous Goods by Road (Europe)
AIIC	Australian Inventory of Industrial Chemicals
ATE	Acute Toxicity Estimate
ASTM	American Society for the Testing of Materials
bar	Biological Reference Values for Chemical Compounds in the Work Area
BAT	Biological tolerance values for occupational exposure
BEL	Biological exposure limits
bw	Body weight
Ceiling	Maximum limit value
CLP	Classification, Labelling and Packaging Regulation; Regulation (EC) No 1272/2008
CMR	Carcinogen, Mutagen or Reproductive Toxicant
DFG	German Research Foundation
DOT	Department of Transportation (United States)
DSL	Domestic Substances List (Canada)
ECHA	European Chemicals Agency
EC Number	European Community number
EmS	Emergency Schedule
ENCS	Existing and New Chemical Substances (Japan)
EPA	U.S. Environmental Protection Agency
EWC	European Waste Codes
GHS	Globally Harmonized System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IBC	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO	International Civil Aviation Organization
IECSC	Inventory of Existing Chemical Substances in China
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
ISO	International Organization for Standardization
KECI	Korean Existing Chemicals Inventory
LC50	Lethal Concentration to 50% of a test population
LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)
MAK	Maximum Concentration at the Workplace
MAL	Measuring Technical Hygienic Air Needs
MARPOL	International Convention for the Prevention of Pollution from Ships
MDLPS	Ministry of Labor and Social Policy
n.o.s.	Not Otherwise Specified
NOAEC	No Observed Adverse Effect Concentration
NOAEL	No Observed Adverse Effect Level
NOELR	No Observable Effect Loading Rate
NZIoC	New Zealand Inventory of Chemicals
OECD	Organization for Economic Cooperation and Development
OEL	Occupational exposure limits
PBT	Persistent, Bioaccumulative and Toxic substance
PICCS	Philippines Inventory of Chemicals and Chemical Substances
PMT	Persistent, Mobile and Toxic
PPE	Personal protective equipment
QSAR	Quantitative Structure Activity Relationship
REACH	Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) Regulation (EC 1907/2006)
RID	Agreement concerning the International Carriage of Dangerous Goods by Rail (Europe)
SADT	Self-Accelerating Decomposition Temperature
SAR	Structure-activity relationship

SDS	Safety Data Sheet
SL	Surface Limit
STEL	Short Term Exposure Limit
STOT RE	Specific target organ toxicity - Repeated exposure
STOT SE	Specific target organ toxicity - Single exposure
SVHC	Substance of very high concern
TCSI	Taiwan Chemical Substance Inventory
TDG	Transport of Dangerous Goods (Canada)
TRGS	Technical Rule for Hazardous Substances
TSCA	Toxic Substances Control Act (United States)
TWA	Time-Weighted Average
UN	United Nations
VOC	Volatile organic compounds
vPvB	Very Persistent and Very Bioaccumulative
vPvM	Very Persistent and Very Mobile
As	Allergenic substance
C	Carcinogen
DS	Dermal Sensitizer
Ot	Ototoxicant
pOt	Ototoxicant - potential to cause hearing disorders
PS	Photosensitizer
RS	Respiratory Sensitizer
S	Sensitizer
poS	Sensitizer - capable of causing occupational asthma
Sa	Simple asphyxiant
Sd	Skin designation
pSd	Skin designation - potential for cutaneous absorption
Sdv	Skin designation - vacated
Sk	Skin notation
dSk	Skin notation - danger of cutaneous absorption
pSk	Skin notation - potential for cutaneous absorption

Key literature references and sources for data used to compile the SDS

U.S. Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
 European Chemicals Agency (ECHA) (ECHA_API)
 U.S. Environmental Protection Agency
 Acute Exposure Guideline Level(s) (AEL(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 Japan National Institute of Technology and Evaluation (NITE)
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 U.S. National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 International Organization for Economic Co-operation and Development (OECD) Environment, Health, and Safety Publications
 International Organization for Economic Co-operation and Development (OECD) High Production Volume Chemicals Program
 International Organization for Economic Co-operation and Development (OECD) Screening Information Data Set
 United Nations World Health Organization (WHO)

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This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

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End of Safety Data Sheet