

SECTION 1 Identification**1.1. Product identifier**

Product form : Mixture
Product name : TRISTEL ULT BASE SOLUTION

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Restrictions on use : Uses other than the intended use of the product.

1.4. Supplier's details**Manufacturer**

Tristel Solutions Limited
Unit 1B
Lynx Business Park
Fordham Road
Newmarket, Cambridgeshire, CB8 7NY
United Kingdom
T +44 (0) 1638 721500
SDS@tristel.com

Distributor

Parker Laboratories Inc.
286
Eldridge Road
Fairfield, New Jersey, 07004
United States
T 1-800-631-8888
parker@parkerlabs.com

1.5. Emergency phone number

Emergency number : If over-exposure occurs call your Poison Center at 1-800-222-1222 or go to poisonhelp.org

SECTION 2 Hazard Identification**2.1. Classification of the substance or mixture****GHS US classification**

Not classified

2.2. Label elements**GHS US labeling**

No labeling applicable

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

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according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
CITRIC ACID MONOHYDRATE	CAS-No.: 5949-29-1	1 – 10	Eye Irrit. 2, H319 STOT SE 3, H335
1-DECANAMINE,N,N-DIMETHYL-N-OXIDE	CAS-No.: 2605-79-0	<1	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 2, H411

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general	: If you feel unwell, seek medical advice.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell.
Personal protection for first-aid responders.	: First aid workers will be equipped with suitable personal protective equipment.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: May cause slight irritation.
Symptoms/effects after eye contact	: May cause slight irritation.
Symptoms/effects after ingestion	: May cause irritation to the digestive tract.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment	: Treat symptomatically.
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SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
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5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire	: Toxic fumes may be released.
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5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
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SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Emergency procedures : Ventilate spillage area.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Environmental precautions : Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

For further information refer to section 13

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

Storage temperature : 15 – 25 °C (59 - 77°F)

Specific end uses : To be used with Tristel ULT Activator Solution. For professional use only.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:

Avoid contact with skin.

Eye protection:

Avoid contact with eyes.

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Respiratory protection:

Ensure there is sufficient ventilation of the area during use.

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Liquid
Color	: Blue.
Odor	: characteristic
Odor threshold	: No data available
pH	: 2 – 3
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: 1.02 – 1.03
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Explosion limits	: No data available
Particle characteristics	: No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

TRISTEL ULT BASE SOLUTION	
LD50 oral rat	> 5000 mg/kg
LC50 Inhalation - Rat	> 5.24 mg/l

CITRIC ACID MONOHYDRATE (5949-29-1)	
LD50 oral rat	11700 mg/kg
LD50 dermal rat	> 2000 mg/kg

1-DECANAMINE,N,N-DIMETHYL-N-OXIDE (2605-79-0)	
LD50 oral rat	300 – 2000 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method), Guideline: EU Method B.1 tris (Acute Oral Toxicity - Acute Toxic Class Method)
LD50 oral	300 – 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))
ATE US (oral)	500 mg/kg body weight

Skin corrosion/irritation : Primary Irritation Index (PII) = 0.3 - Slightly irritating
pH: 2 – 3

Serious eye damage/irritation : The maximum average score of 22.0 was obtained 1 hour after treatment according to OCSPP 870.2400 and OECD 405 guidelines - Mildly irritating
pH: 2 – 3

Respiratory or skin sensitization : Not a skin sensitizer – OCSPP 870.2600/OECD 429

Germ cell mutagenicity : No data available to indicate product or any components present greater than 0.1% are mutagenetic or genotoxic.

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

CITRIC ACID MONOHYDRATE (5949-29-1)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified

1-DECANAMINE,N,N-DIMETHYL-N-OXIDE (2605-79-0)	
NOAEL (oral,rat,90 days)	40 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Guideline: other:

Aspiration hazard : Not classified

CITRIC ACID MONOHYDRATE (5949-29-1)	
Viscosity, kinematic	Not applicable

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : May cause slight irritation.

Symptoms/effects after eye contact : May cause slight irritation.

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Symptoms/effects after ingestion : May cause irritation to the digestive tract.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

CITRIC ACID MONOHYDRATE (5949-29-1)

LC50 - Fish [1]	440 – 706 mg/l
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1-DECANAMINE,N,N-DIMETHYL-N-OXIDE (2605-79-0)

LC50 - Fish [1]	134 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
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EC50 - Crustacea [1]	10.4 mg/l Test organisms (species): Daphnia magna
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LC50 - Fish [2]	31.8 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
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EC50 - Crustacea [2]	3.1 mg/l Test organisms (species): Daphnia magna
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NOEC (chronic)	0.7 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
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NOEC chronic fish	0.42 mg/l
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12.2. Persistence and degradability

TRISTEL ULT BASE SOLUTION

Persistence and degradability	Biodegradability in water: no data available.
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CITRIC ACID MONOHYDRATE (5949-29-1)

Persistence and degradability	Rapidly degradable
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Biodegradation	97 %
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1-DECANAMINE,N,N-DIMETHYL-N-OXIDE (2605-79-0)

Persistence and degradability	Rapidly degradable
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Biodegradation	97 %
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12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified

Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Regional waste regulation : Disposal must be done according to official regulations.

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Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.

SECTION 14 Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

UN-No. (DOT)	: Not applicable
UN-No. (TDG)	: Not applicable
UN-No. (IMDG)	: Not applicable
UN-No. (IATA)	: Not applicable

14.2. UN Proper Shipping Name

Proper Shipping Name (DOT)	: Not applicable
Proper Shipping Name (TDG)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT)	: Not applicable
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TDG

Transport hazard class(es) (TDG)	: Not applicable
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IMDG

Transport hazard class(es) (IMDG)	: Not applicable
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IATA

Transport hazard class(es) (IATA)	: Not applicable
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14.4. Packing group

Packing group (DOT)	: Not applicable
Packing group (TDG)	: Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable

14.5. Environmental hazards

Other information	: No supplementary information available.
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14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT

Not applicable

TDG

Not applicable

IMDG

Not applicable

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IATA

Not applicable

SECTION 15 Regulatory information

15.1. Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
CITRIC ACID MONOHYDRATE	5949-29-1	Not present	-	
1-DECANAMINE,N,N-DIMETHYL-N-OXIDE	2605-79-0	Not present	-	

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. State regulations

No additional information available

SECTION 16 Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date : 7/16/2025

Issue date : 5/31/2023

Full text of hazard classes and H-statements	
H302	Harmful if swallowed
H318	Causes serious eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.