TRISTEL OPH ACTIVATOR SOLUTION

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

Issue date: 04-14-2025 Revision date: 07-17-2025 Supersedes: 04-14-2025 Version: 2.0

SECTION 1 Identification

1.1. GHS Product identifier

Product form : Mixture

Product name : TRISTEL OPH ACTIVATOR 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

INNOVA Medical
136 Sparks Avenue
Toronto, Ontario M2H 2S4
Canada
T +4166150185

1.5. Emergency phone number

Emergency number : 1-844-764-7669

SECTION 2 Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS CA)

Not classified

2.2. GHS label elements, including precautionary statements

GHS CA labeling

No labeling applicable

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
1-DECANAMINE,N,N-DIMETHYL-N-OXIDE	SURFACTANT DECAMINE OXIDE	CAS-No.: 2605-79-0	< 1	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
SODIUM CHLORITE 100%	-	CAS-No.: 7758-19-2	< 1	Ox. Sol. 1, H271 Acute Tox. 3 (Oral), H301 Acute Tox. 2 (Dermal), H310 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 3, H412

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 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.
First-aid measures general : If you feel unwell, seek medical advice.
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.

SECTION 5 Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective actions for fire-fighters

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

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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 any 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 OPH Base 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 (PPE)

Personal protective equipment:
Wear recommended personal protective equipment.

Hand protection:
Avoid contact with skin.

Eye protection:
Avoid contact with eyes.

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	:	Colorless
Odor	:	odorless
Odor threshold	:	No data available
pH	:	10.3-11.3
Relative evaporation rate (butyl acetate=1)	:	No data available
Relative evaporation rate (ether=1)	:	No data available
Melting point	:	Not applicable
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Not applicable
Vapor pressure	:	No data available
Relative vapor density at 20°C	:	No data available
Relative density	:	1.000-1.010
Solubility	:	No data available
Partition coefficient n-octanol/water (Log	:	No data available
Pow) 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

Reactivity	:	No additional information available
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	No additional information available
Conditions to avoid	:	None under recommended storage and handling conditions (see section 7).
Incompatible materials	:	No additional information available
Hazardous decomposition products	:	No additional information available
Hardening time:	:	No additional information available

SECTION 11 Toxicological information

11.1. Likely routes of exposure

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

TRISTEL OPH ACTIVATOR SOLUTION	
LD50 oral rat	> 2000 mg/kg
LC50 Inhalation - Rat	> 5.61 mg/l

SODIUM CHLORITE 100% (7758-19-2)	
ATE CA (oral)	100 mg/kg body weight

SODIUM CHLORITE 100% (7758-19-2)	
ATE CA (Dermal)	50 mg/kg body weight

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 CA (oral)	500 mg/kg body weight

Skin corrosion/irritation : OECD 404 Slight erythema - Slight irritant
pH: 10.3-11.3

Serious eye damage/irritation : Not classified
pH: 10.3-11.3

Respiratory or skin sensitization : Not a skin sensitizer – ISO 10993-10

Germ cell mutagenicity : Non-Mutagenic – OECD 471

Carcinogenicity : Not classified

SODIUM CHLORITE 100% (7758-19-2)	
IARC group	3 - Not Classifiable

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

SODIUM CHLORITE 100% (7758-19-2)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

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

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.

SECTION 12 Ecological information

12.1. Toxicity

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

SODIUM CHLORITE 100% (7758-19-2)	
LC50 - Fish [1]	265 – 310 mg/l
EC50 - Other aquatic organisms [1]	0.29 mg/l

12.2. Persistence and degradability

TRISTEL OPH ACTIVATOR SOLUTION	
Persistence and degradability	Biodegradability in water: no data available.

SODIUM CHLORITE 100% (7758-19-2)	
Persistence and degradability	Biodegradability in water: no data available.

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

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.
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 TDG / DOT / IMDG / IATA

14.1. UN Number

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

14.2. UN Proper Shipping Name

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

14.3. Transport hazard class(es)

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

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

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

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

14.4. Packing group, if applicable

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

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

TDG
Not applicable

DOT
Not applicable

IMDG
Not applicable

IATA
Not applicable

14.7. Transport in bulk according to Annex II of MARPOL 73/78[9] and the IBC Code[10]

Not applicable

SECTION 15 Regulatory information

SODIUM CHLORITE 100% (7758-19-2)

Listed on the Canadian DSL (Domestic Substances List)

SODIUM CHLORITE 100% (7758-19-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on INSQ (Mexican National Inventory of Chemical Substances)

SECTION 16 Other Information

Issue date : 04-14-2025
Revision date : 07-17-2025
Supersedes : 04-14-2025

Full text of hazard classes and H-statements:

H271	May cause fire or explosion; strong oxidizer
H301	Toxic if swallowed

Full text of hazard classes and H-statements:	
H302	Harmful if swallowed
H310	Fatal in contact with skin
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

Safety Data Sheet (SDS), Canada

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.

TRISTEL OPH BASE SOLUTION

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)
Issue date: 04-14-2025 Revision date: 07-17-2025 Supersedes: 04-14-2025 Version: 2.0

SECTION 1 Identification

1.1. GHS Product identifier

Product form : Mixture
Product name : TRISTEL OPH 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
INNOVA Medical
136 Sparks Avenue
Toronto, Ontario M2H 2S4
Canada
T +4166150185

1.5. Emergency phone number

Emergency number : 1-844-764-7669

SECTION 2 Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS CA)

Not classified

2.2. GHS label elements, including precautionary statements

GHS CA labeling

No labeling applicable

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
CITRIC ACID MONOHYDRATE	2, HYDROXY-1,2,3 PROPANE TRICARBOXYLIC ACID	CAS-No.: 5949-29-1	5 – 10	Eye Irrit. 2, H319 STOT SE 3, H335
1-DECANAMINE,N,N-DIMETHYL-N-OXIDE	SURFACTANT DECAMINE 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 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.
First-aid measures general : If you feel unwell, seek medical advice.
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.

SECTION 5 Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective actions for fire-fighters

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

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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 any 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 OPH 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 (PPE)

Personal protective equipment:
Wear recommended personal protective equipment.

Hand protection:
Avoid contact with skin.

Eye protection:
Avoid contact with eyes.

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	:	2.0-3.0
Relative evaporation rate (butyl acetate=1)	:	No data available
Relative evaporation rate (ether=1)	:	No data available
Melting point	:	Not applicable
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Not applicable
Vapor pressure	:	No data available
Relative vapor density at 20°C	:	No data available
Relative density	:	1.020-1.030
Solubility	:	No data available
Partition coefficient n-octanol/water (Log	:	No data available
Pow) 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

Reactivity	:	The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	No dangerous reactions known under normal conditions of use.
Conditions to avoid	:	None under recommended storage and handling conditions (see section 7).
Incompatible materials	:	No additional information available
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hardening time:	:	No additional information available

SECTION 11 Toxicological information

11.1. Likely routes of exposure

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

TRISTEL OPH 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 CA (oral)	500 mg/kg body weight

Skin corrosion/irritation : Primary Irritation Index (PII) = 0.3 - Slightly irritating
pH: 2.0-3.0

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.

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

SECTION 12 Ecological information

12.1. Toxicity

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

12.2. Persistence and degradability

TRISTEL OPH BASE SOLUTION	
Persistence and degradability	Biodegradability in water: no data available.
CITRIC ACID MONOHYDRATE (5949-29-1)	
Persistence and degradability	Rapidly degradable
Biodegradation	97 %
1-DECANAMINE,N,N-DIMETHYL-N-OXIDE (2605-79-0)	
Persistence and degradability	Rapidly degradable
Biodegradation	97 %

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.
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 TDG / DOT / IMDG / IATA

14.1. UN Number

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

14.2. UN Proper Shipping Name

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

14.3. Transport hazard class(es)

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

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

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

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

14.4. Packing group, if applicable

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

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

TDG
Not applicable

DOT
Not applicable

IMDG
Not applicable

IATA
Not applicable

14.7. Transport in bulk according to Annex II of MARPOL 73/78[9] and the IBC Code[10]

Not applicable

SECTION 15 Regulatory information

No additional information available

SECTION 16 Other Information

Issue date : 04-14-2025
Revision date : 07-17-2025
Supersedes : 04-14-2025

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

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.

TRISTEL OPH WORKING SOLUTION

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)
Issue date: 04-14-2025 Revision date: 07-17-2025 Supersedes: 04-14-2025 Version: 2.0

SECTION 1 Identification

1.1. GHS Product identifier

Product form : Mixture
Product name : TRISTEL OPH WORKING SOLUTION

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Disinfectant
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
INNOVA Medical
136 Sparks Avenue
Toronto, Ontario M2H 2S4
Canada
T +4166150185

1.5. Emergency phone number

Emergency number : 1-844-764-7669

SECTION 2 Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS CA)

Not classified

2.2. GHS label elements, including precautionary statements

GHS CA labeling

No labeling applicable

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
chlorine dioxide ... %	chlorine dioxide ... %	CAS-No.: 10049-04-4	< 1	Acute Tox. 3 (Oral), H301 Skin Corr. 1B, H314 Aquatic Acute 1, H400

SECTION 4 First-aid measures

4.1. Description of necessary first-aid measures

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

First-aid measures after ingestion : Rinse mouth. Get medical advice/attention if you feel unwell. Do NOT induce vomiting.

First-aid measures general : If you feel unwell, seek medical advice.

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.

SECTION 5 Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective actions for fire-fighters

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

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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. Wear personal protective equipment.
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 any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.
Specific end uses : Disinfectant Foam. For professional use only.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

TRISTEL OPH WORKING SOLUTION	
Canada (Alberta) - Occupational Exposure Limits	
Local name	Chlorine dioxide
OEL TWA	0.3 mg/m³
	0.1 ppm
OEL STEL	0.8 mg/m³
	0.3 ppm
Regulatory reference	Alberta Regulation 191/2021
Canada (Quebec) - Occupational Exposure Limits	
Local name	Chlorine dioxide
Plafond (OEL C)	0.1 ppm
Regulatory reference	S-2.1, r. 13 - Regulation respecting occupational health and safety
Canada (British Columbia) - Occupational Exposure Limits	
Local name	Chlorine dioxide
OEL TWA	0.1 ppm
OEL STEL	0.3 ppm
Regulatory reference	OHS Guidelines Part 5: Chemical Agents and Biological Agents (WorkSafe BC)
Canada (Manitoba) - Occupational Exposure Limits	
Local name	Chlorine dioxide
OEL C	0.28 mg/m³
	0.1 ppm
Notations and remarks	TLV® Basis: Resp tract irr; pulm edema
Regulatory reference	ACGIH 2025
Canada (Newfoundland and Labrador) - Occupational Exposure Limits	
Local name	Chlorine dioxide

TRISTEL OPH WORKING SOLUTION	
OEL C	0.28 mg/m³
	0.1 ppm
Notations and remarks	TLV® Basis: Resp tract irr; pulm edema
Regulatory reference	ACGIH 2025
Canada (Nova Scotia) - Occupational Exposure Limits	
Local name	Chlorine dioxide
OEL C	0.28 mg/m³
	0.1 ppm
Notations and remarks	TLV® Basis: Resp tract irr; pulm edema
Regulatory reference	ACGIH 2025
Canada (Nunavut) - Occupational Exposure Limits	
Local name	Chlorine dioxide
OEL TWA	0.1 ppm
OEL STEL	0.3 ppm
Regulatory reference	Occupational Health and Safety Regulations, Nu Reg 003-2016 (Amendment R-044-2021)
Canada (Northwest Territories) - Occupational Exposure Limits	
Local name	Chlorine dioxide
OEL TWA	0.1 ppm
OEL STEL	0.3 ppm
Regulatory reference	Occupation Health and Safety Regulations R-039-2015 (R-090-2024)
Canada (Ontario) - Occupational Exposure Limits	
Local name	Chlorine dioxide
OEL TWAEV	0.1 ppm
	0.3 ppm
Regulatory reference	Ontario Occuational Exposure Limits under Regulation 833
Canada (Prince Edward Island) - Occupational Exposure Limits	
Local name	Chlorine dioxide
OEL C	0.28 mg/m³
	0.1 ppm
Notations and remarks	TLV® Basis: Resp tract irr; pulm edema
Regulatory reference	ACGIH 2025
Canada (Saskatchewan) - Occupational Exposure Limits	
Local name	Chlorine dioxide
OEL TWA	0.1 ppm
OEL STEL	0.3 ppm
Regulatory reference	The Occupational Health and Safety Regulations, 2020. Chapter S-15.1 Reg 10

chlorine dioxide ... % (10049-04-4)	
Canada (Alberta) - Occupational Exposure Limits	
Local name	Chlorine dioxide
OEL TWA	0.3 mg/m³
	0.1 ppm
OEL STEL	0.8 mg/m³
	0.3 ppm
Regulatory reference	Alberta Regulation 191/2021
Canada (Quebec) - Occupational Exposure Limits	
Local name	Chlorine dioxide
Plafond (OEL C)	0.1 ppm
Regulatory reference	S-2.1, r. 13 - Regulation respecting occupational health and safety
Canada (British Columbia) - Occupational Exposure Limits	
Local name	Chlorine dioxide
OEL TWA	0.1 ppm
OEL STEL	0.3 ppm
Regulatory reference	OHS Guidelines Part 5: Chemical Agents and Biological Agents (WorkSafe BC)
Canada (Manitoba) - Occupational Exposure Limits	
Local name	Chlorine dioxide
OEL C	0.1 ppm
Notations and remarks	TLV® Basis: Resp tract irr; pulm edema
Regulatory reference	ACGIH 2024
Canada (Newfoundland and Labrador) - Occupational Exposure Limits	
Local name	Chlorine dioxide
OEL C	0.1 ppm
Notations and remarks	TLV® Basis: Resp tract irr; pulm edema
Regulatory reference	ACGIH 2024
Canada (Nova Scotia) - Occupational Exposure Limits	
Local name	Chlorine dioxide
OEL C	0.1 ppm
Notations and remarks	TLV® Basis: Resp tract irr; pulm edema
Regulatory reference	ACGIH 2024
Canada (Nunavut) - Occupational Exposure Limits	
Local name	Chlorine dioxide
OEL TWA	0.1 ppm
OEL STEL	0.3 ppm
Regulatory reference	Occupational Health and Safety Regulations, Nu Reg 003-2016 (Amendment R-044-2021)

chlorine dioxide ... % (10049-04-4)	
Canada (Northwest Territories) - Occupational Exposure Limits	
Local name	Chlorine dioxide
OEL TWA	0.1 ppm
OEL STEL	0.3 ppm
Regulatory reference	Occupation Health and Safety Regulations R-039-2015 (R-090-2024)
Canada (Ontario) - Occupational Exposure Limits	
Local name	Chlorine dioxide
OEL TWAEV	0.1 ppm
	0.3 ppm
Regulatory reference	Ontario Occuational Exposure Limits under Regulation 833
Canada (Prince Edward Island) - Occupational Exposure Limits	
Local name	Chlorine dioxide
OEL C	0.1 ppm
Notations and remarks	TLV® Basis: Resp tract irr; pulm edema
Regulatory reference	ACGIH 2024
Canada (Saskatchewan) - Occupational Exposure Limits	
Local name	Chlorine dioxide
OEL TWA	0.1 ppm
OEL STEL	0.3 ppm
Regulatory reference	The Occupational Health and Safety Regulations, 2020. Chapter S-15.1 Reg 10

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 (PPE)

Personal protective equipment:
Wear recommended personal protective equipment.

Hand protection:
Protective gloves

Eye protection:
Safety glasses

Respiratory protection:
Ensure there is sufficient ventilation of the area during use.

Personal protective equipment symbol(s):

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	:	Liquid
Color	:	yellow
Odor	:	characteristic
Odor threshold	:	No data available
pH	:	2 – 3
Relative evaporation rate (butyl acetate=1)	:	No data available
Relative evaporation rate (ether=1)	:	No data available
Melting point	:	Not applicable
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Not applicable
Vapor pressure	:	No data available
Relative vapor density at 20°C	:	No data available
Relative density	:	No data available
Solubility	:	No data available
Partition coefficient n-octanol/water (Log	:	No data available
Pow) 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

Reactivity	:	No additional information available
Chemical stability	:	No additional information available
Possibility of hazardous reactions	:	No additional information available
Conditions to avoid	:	None under recommended storage and handling conditions (see section 7).
Incompatible materials	:	No additional information available
Hazardous decomposition products	:	No additional information available
Hardening time:	:	No additional information available

SECTION 11 Toxicological information

11.1. Likely routes of exposure

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

TRISTEL OPH WORKING SOLUTION	
LD50 oral rat	> 2000 mg/kg

chlorine dioxide ... % (10049-04-4)	
LD50 oral rat	93.86 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Guideline: EU Method B.1 (Acute Toxicity (Oral)), Remarks on results: other:, 95% CL: 45,52 - 193,53
LC50 Inhalation - Rat (Vapors)	0.041 mg/l Source: ECHA

Skin corrosion/irritation : OECD 404 Slight erythema - Slight irritant
pH: 2 – 3

Serious eye damage/irritation : Not classified
pH: 2 – 3

Respiratory or skin sensitization : Not a skin sensitizer - ISO 10993-10

Germ cell mutagenicity : Non-Mutagenic - OECD 471

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

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.

SECTION 12 Ecological information

12.1. Toxicity

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

chlorine dioxide ... % (10049-04-4)	
LC50 - Fish [1]	75 mg/l Test organisms (species): Cyprinodon variegatus
LC50 - Fish [2]	0.021 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	0.063 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	1096 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	0.324 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC chronic fish	≥ 500 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '36 d'
NOEC (chronic)	≥ 500 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.2. Persistence and degradability

TRISTEL OPH WORKING SOLUTION	
Persistence and degradability	Biodegradability in water: no data available.

chlorine dioxide ... % (10049-04-4)	
Persistence and degradability	Biodegradability in water: no data available.

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.
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 TDG / DOT / IMDG / IATA

14.1. UN Number

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

14.2. UN Proper Shipping Name

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

14.3. Transport hazard class(es)

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

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

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

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

14.4. Packing group, if applicable

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

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

TDG
Not applicable

DOT
Not applicable

IMDG
Not applicable

IATA
Not applicable

14.7. Transport in bulk according to Annex II of MARPOL 73/78[9] and the IBC Code[10]

Not applicable

SECTION 15 Regulatory information

No additional information available

SECTION 16 Other Information

Issue date : 04-14-2025
Revision date : 07-17-2025
Supersedes : 04-14-2025

Full text of hazard classes and H-statements:	
H301	Toxic if swallowed
H314	Causes severe skin burns and eye damage
H400	Very toxic to aquatic life

Safety Data Sheet (SDS), Canada

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.