

TristelTM

Safety Data Sheets Explained

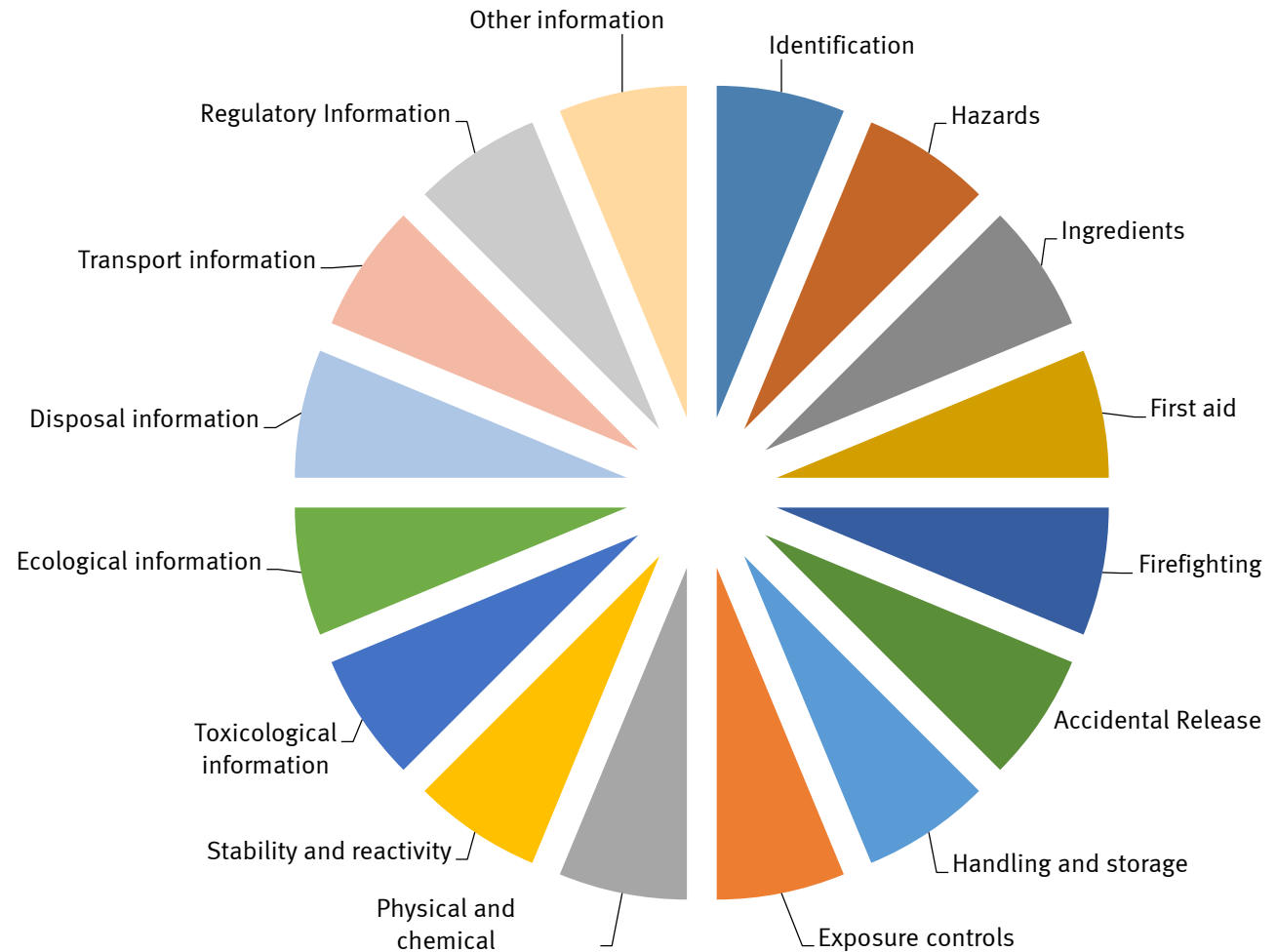
1. They enable users to implement the necessary control measures relating to the protection of human health and safety in the workplace and protection of the environment.
2. They inform users of the hazards associated with the product and provide information on what actions to carry out in case of an emergency.
3. They are also used by Health and Safety Departments to carry out COSHH (control of substances hazardous to health) assessments to ensure the correct risk controls are in place prior to handling the product.

A safety data sheet is not a fixed length document.

The length of a safety data sheet is commensurate with the hazards of the substance or mixture and the information that is available.

An SDS is comprised of 16 sections:

Each section contains sub headings.



1. Identification of the substance/mixture and of the company/undertaking

Product Name: e.g. **1.1 Product identifier**

Tristel Fuse for Surfaces Base Solution

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

Suppliers must indicate the relevant **identified use(s)** of a product using a brief (understandable) description of what the product is. Uses advised against must also be stated.

1.3 Details of the supplier of the safety data sheet

Suppliers of the safety data sheet must give their full address and contact details

1.4 Emergency telephone number

Suppliers must list a phone number where competent staff can give advice in an emergency situation

2. Hazards Identification

2.1 Classification of the substance or mixture


This section lists the products classification under CLP regulations including hazard statement abbreviations and most important adverse effects.

2.2 Label Elements

This section shows the hazards information that will be stated on the label of the product. The hazard information will include the hazard statements, hazard pictogram, signal words and precautionary statements.

2.3 Other Hazards

This section lists if the product is classified as a PBT or vPvB (PBT = Persistent, bio-accumulative and toxic, vPvB = Very persistent and very bio-accumulative).

Section 2: Hazards identification
2.1. Classification of the substance or mixture
<p>Classification under CLP: Skin Irrit. 2: H315; Eye Irrit. 2: H319; Aquatic Chronic 3: H412</p> <p>Most important adverse effects: Causes skin irritation. Causes serious eye irritation. Harmful to aquatic life with long lasting effects.</p>
2.2. Label elements
<p>Label elements:</p> <p>Hazard statements: H315: Causes skin irritation. H319: Causes serious eye irritation. H412: Harmful to aquatic life with long lasting effects.</p> <p>Signal words: Warning</p> <p>Hazard pictograms: GHS07: Exclamation mark</p> <div style="text-align: center;">  </div> <p>Precautionary statements: P280: Wear protective gloves/protective clothing/eye protection. P302+352: IF ON SKIN: Wash with plenty of water/ P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P332+313: If skin irritation occurs: Get medical advice. P337+313: If eye irritation persists: Get medical advice.</p>
2.3. Other hazards
<p>PBT: This product is not identified as a PBT/vPvB substance.</p>

3. Composition/information on ingredients

3.1 – Substances

This lists the hazards of the single substance – Tristel products are mixtures so this section is not shown on the SDS.

3.2 – Mixtures

This lists the hazards associated with the pure substances, within the mixture, that meet the criteria on concentration limits for which the substances in a mixture must be indicated as hazardous ingredients.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

1-DECANAMINE,N,N-DIMETHYL-N-OXIDE

EINECS	CAS	PBT / WEL	CLP Classification	Percent
220-020-5	2605-79-0	-	Aquatic Acute 1: H400; Aquatic Chronic 2: H411; Eye Dam. 1: H318; Acute Tox. 4: H302	1-10%

CITRIC ACID MONOHYDRATE

-	5949-29-1	-	Eye Irrit. 2: H319	1-10%
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On Tristel chlorine dioxide working solution safety data sheets, for end users information purposes only, chlorine dioxide as a pure substance is listed in section 3.2 as a non-classified ingredient.

The percentage of chlorine dioxide in working solutions is significantly below the concentration limit (0.1%) for it to be listed as a hazardous ingredient.

The percentage of chlorine dioxide required for a product to be classified as hazardous (Eye Irritant) is 0.3%.

Non-classified ingredients:

CHLORINE DIOXIDE

EINECS	CAS	CHIP Classification	CLP Classification	Percent
233-162-8	10049-04-4	-	Acute Tox. 3: H301; Skin Corr. 1B: H314; Aquatic Acute 1: H400	<1%

4. First Aid Measures

4.1 Description of first aid measures

First aid instructions are provided by relevant routes of exposure, with subdivisions indicating the procedure for each route.

4.2 Most important symptoms and effects, both acute and delayed

Briefly summarised information is provided on the most important symptoms and effects, both acute and delayed, from exposure.

4.3 Indication of any immediate medical attention and special treatment needed

Lists special or immediate treatment, e.g. eye wash must be available

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Wash immediately with plenty of soap and water. If skin irritation or rash occurs: Get medical advice.

Eye contact: Rinse eyes with water and seek medical advice if irritation persists.

Ingestion: Wash out mouth with water.

Inhalation: Move to fresh air in case of accidental inhalation of vapours.

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

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: There may be irritation of the throat.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

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

Immediate / special treatment: Eye bathing equipment should be available on the premises.

5. Firefighting Measures

5.1 Extinguishing media

States what extinguishing media should be used

5.2 Special hazards arising from substance or mixture

Information is provided on hazards that may arise from the substance or mixture, e.g. hazardous combustion products that form when the substance or mixture burns

5.3 Advice for firefighters

Advice is provided on any protective to be taken during firefighting and on special protective equipment for firefighters

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

6. Accidental Release Measures

This section recommends the appropriate response to spills, leaks or releases, to prevent or minimise the adverse effects on persons, property and the environment.

6.1 Personal precautions, protective equipment and emergency procedures

6.2 Environmental precautions

6.3 Methods and material for containment and cleaning up

Appropriate advice shall be provided on how to contain a spill, and how to clean-up a spill.

6.4 Reference to other sections

If appropriate Sections 8 and 13 shall be referred

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS. Refer to section 13 of SDS.

7. Handling and Storage

7.1 Precautions for Safe Handling

Instructions on how to handle the product safely.

7.2 Conditions for safer storage, including any incompatibilities

The advice listed in this section is consistent with the physical and chemical properties described in Section 9 of the safety data sheet. Also if relevant, advice shall be provided on specific storage requirements.

7.3 Specific end use(s)

For mixtures designed for specific end use(s), detailed recommendations relating to the identified use(s) referred to in subsection 1.2 are stated.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.
Avoid the formation or spread of mists in the air.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed.

7.3. Specific end use(s)

Specific end use(s): To be used in conjunction with Tristel Fuse for Surfaces Activator solution. For professional use only.

8. Exposure controls/personal protection

This section of the safety data sheet describes the applicable occupational exposure limits and necessary risk control measures.

8.1 Control parameters

National limit values, e.g. work exposure limits (WEL) which are currently applicable in the Member State (e.g. UK) in which the safety data sheet is being provided are listed for the substance or for each of the substances in the mixture that have a WEL.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Hazardous ingredients:

PROPAN-2-OL

Workplace exposure limits:

Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	999 mg/m3	1250 mg/m3	-	-

8.2 Exposure controls

This section gives a description of appropriate exposure control measures that relate to the identified use(s) of the substance or mixture as referred to in subsection 1.2. This information stated shall be sufficient to enable the employer to carry out an assessment of risk to the safety and health of workers arising from the presence of the substance or mixture.

8.2. Exposure controls

Respiratory protection: Respiratory protection not required.

Hand protection: Protective gloves.

Eye protection: Safety glasses. Ensure eye bath is to hand.

Skin protection: Protective clothing.

9. Physical and Chemical Properties

This section of the safety data sheet lists the physical and chemical data relating to the product, if data is available.

9.1 Information on basic and chemical properties

9.2 Other information

Other physical and chemical parameters are indicated as necessary.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid	
Colour: Green	
Evaporation rate: No data available.	
Oxidising: No data available.	
Solubility in water: No data available.	
Viscosity: No data available.	
Boiling point/range °C: No data available.	Melting point/range °C: No data available.
Flammability limits %: lower: No data available.	upper: No data available.
Flash point °C: No data available.	Part.coeff. n-octanol/water: No data available.
Autoflammability °C: No data available.	Vapour pressure: No data available.
Relative density: 1.010-1.030	pH: 1.5-3.5
VOC g/l: No data available.	

9.2. Other information

Other information: No data available.

10. Stability and Reactivity

This section of the safety data sheet describes the stability of the product and the possibility of hazardous reactions occurring under certain conditions of use.

10.1 Reactivity

10.2 Chemical stability

10.3 Possibility of hazardous reactions

10.4 Conditions to avoid

10.5 Incompatible materials

10.6 Hazardous decomposition products

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.
Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

11. Toxicological Information

11.1 Information on toxicological effects

This section lists the toxicological information (if available) for substances within the product as well as listing the relevant hazards for the product. The symptoms and routes of exposure are also listed.

Section 11: Toxicological information

11.1. Information on toxicological effects

Hazardous Ingredients:

CITRIC ACID MONOHYDRATE

DERMAL	RAT	LD50	>2000	mg/kg
ORAL	RAT	LD50	11700	mg/kg

Relevant hazards for substance:

Hazard	Route	Basis
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated

Symptoms / routes of exposure

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

12. Ecological Information

This section of the safety data sheet describes the information provided to evaluate the environmental impact of the product if it is released to the environment.

12.1 Toxicology

Information on toxicity using data from tests performed on aquatic and/or terrestrial organisms is provided when available.

12.2 Persistence and degradability

Persistence and degradability is the potential for the substance or the appropriate substances in a mixture to degrade in the environment.

12.3 Bioaccumulative potential

Bioaccumulative potential is the potential of the substance or certain substances in a mixture to accumulate in biota and, eventually, to pass through to the food chain.

Section 12: Ecological information

12.1. Toxicity

Hazardous ingredients:

CITRIC ACID MONOHYDRATE

FISH	96H LC50	440-706	mg/l
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12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4 Mobility in soil

Mobility in soil is the potential of the substance or the constituents of a mixture, if released to the environment, to move under natural forces to the groundwater or to a distance from the site of release.

12.5 Results of PBT and vPvB assessment

When a chemical safety report is required, the results of the PBT and vPvB assessment as set out in the chemical safety report are given if available.

12.6 Other adverse effects

12.4. Mobility in soil

Mobility: Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

13. Disposal Considerations

13.1 Waste treatment methods

This section identifies if there are any specific instructions required for the disposal of the product. It is also stated that the end user needs to be aware of any regional or national regulations regarding disposal.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

14. Transport Information

14.1 UN number

This section identifies the UN number for the product.

14.2 UN proper shipping name

This section lists the shipping name and also states the N.O.S chemical name.

14.3 Transport hazard class(es)

This section identifies the transport class of the product – transport class 8 (corrosive).

14.4 Packing group

This section identifies the packing group, this dictates how much product can be shipped as LQ (limited quantities) – for packing group II packages up to 1ltr can be sent as LQ.

14.5 Environmental hazards

This section identifies if the product is a marine pollutant or environmentally hazardous.

14.6 Special precautions for user

Section 14: Transport information	
14.1. UN number	UN number: UN1903
14.2. UN proper shipping name	Shipping name: DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (DIDECYLDIMETHYLAMMONIUM CHLORIDE)
14.3. Transport hazard class(es)	Transport class: 8
14.4. Packing group	Packing group: II
14.5. Environmental hazards	Environmentally hazardous: Yes Marine pollutant: No
14.6. Special precautions for user	Special precautions: No special precautions. Tunnel code: E Transport category: 2

15. Regulatory Information

This section of the safety data sheet describes other regulatory information on the product that is not already provided in the safety data sheet.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This section states that the product has been classified according to the relevant regulations

15.2 Chemical safety assessment

This section indicates if a chemical safety assessment has been carried out on the product by the supplier.

Section 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Specific regulations: This product has been classified in accordance with CLP and CHIP regulations and compiled in accordance with Annex II of REACH.

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

16. Other Information

This section of the safety data sheet describes the information relevant to the compilation of the safety data sheet. It incorporates other information that is not included in Sections 1 to 15.

For example: List of relevant hazard statements, expanded from section 3.2.

It is important to note that this is not a list of hazards for the product, it is the hazard statements in full for the individual components of the mixture that are shown in section 3.2.

Section 16: Other Information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3: H302: Harmful if swallowed.

H315: Causes skin irritation.

H318: Causes serious eye damage.

H319: Causes serious eye irritation.

H400: Very toxic to aquatic life.

H411: Toxic to aquatic life with long lasting effects.

H412: Harmful to aquatic life with long lasting effects.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.