

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

1.1. Product identifier

Product name: TRISTEL ACTIVATOR H SOLUTION

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

Use of substance / mixture: For use with Hydrosan solution. For professional use only. Uses advised against: Uses other than the intended use of the product

1.3. Details of the supplier of the safety data sheet

Company name: Tristel Solutions Limited

Lynx Business Park

Fordham Road

Newmarket

Cambridgeshire

CB8 7NY

United Kingdom

Tel: +44 (0) 1638 721 500

Fax: +44 (0) 1638 721 911

Email: healthandsafety@tristel.com

1.4. Emergency telephone number

Emergency tel: +44 (0) 1638 721 500

(office hours only)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Skin Corr. 1C: H314

Classification under CHIP: Xi: R36/37/38

Most important adverse effects: Causes severe skin burns and eye damage.

2.2. Label elements

Label elements under CLP:

Hazard statements: H314: Causes severe skin burns and eye damage.

Signal words: Danger

Hazard pictograms: GHS05: Corrosion



SAFETY DATA SHEET

TRISTEL ACTIVATOR H SOLUTION

Page: 2

Precautionary statements: P260: Do not breathe fumes/mist/vapours/spray.
P303+361+353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower.
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P280: Wear protective gloves/protective clothing/eye protection.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

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

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

HYDROCHLORIC ACID

EINECS	CAS	CHIP Classification	CLP Classification	Percent
231-595-7	-	-	Skin Corr. 1B: H314; STOT SE 3: H335	1-10%

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water.
Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.
Ingestion: Wash out mouth with water. Consult a doctor.
Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so.

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.

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

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

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

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.

[cont...]

SAFETY DATA SHEET
TRISTEL ACTIVATOR H SOLUTION

Page: 3

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.

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.

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. Do not handle in a confined space. Avoid the formation or spread of mists in the air.

7.2. Conditions for safe storage, including any incompatibilities

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

7.3. Specific end use(s)

Specific end use(s): For use with Hydrosan solution. For professional use only.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Hazardous ingredients:

HYDROCHLORIC ACID...100%

Workplace exposure limits:

Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL

[cont...]

SAFETY DATA SHEET
TRISTEL ACTIVATOR H SOLUTION

Page: 4

UK	8 mg/m3	8 mg/m3	-	-
----	---------	---------	---	---

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: Respiratory protection not required.

Hand protection: Protective gloves.

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

Skin protection: Protective clothing.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Colourless

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.

Flammability limits %: lower: No data available.

Flash point °C: No data available.

Autoflammability °C: No data available.

Relative density: No data available.

VOC g/l: No data available.

Melting point/range °C: No data available.

upper: No data available.

Part.coeff. n-octanol/water: No data available.

Vapour pressure: No data available.

pH: <1

9.2. Other information

Other information: No data available.

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.

[cont...]

SAFETY DATA SHEET
TRISTEL ACTIVATOR H SOLUTION

Page: 5

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.

Section 11: Toxicological information

11.1. Information on toxicological effects

Relevant effects for mixture:

Effect	Route	Basis
Irritation	OPT INH DRM	Hazardous: calculated

Symptoms / routes of exposure

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.

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

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values: No data available.

12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: Readily absorbed into soil. Not classified as environmentally hazardous.

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.

Section 13: Disposal considerations

[cont...]

SAFETY DATA SHEET
TRISTEL ACTIVATOR H SOLUTION

Page: 6

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.

Section 14: Transport information

14.1. UN number

UN number: UN1789

14.2. UN proper shipping name

Shipping name: HYDROCHLORIC ACID

14.3. Transport hazard class(es)

Transport class: 8

14.4. Packing group

Packing group: III

14.5. Environmental hazards

Environmentally hazardous: No

Marine pollutant: No

14.6. Special precautions for user

Special precautions: No special precautions.

Tunnel code: E

Transport category: 3

IMDG seg. group: NOT APPLICABLE

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk: Not applicable

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.

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.

[cont...]

SAFETY DATA SHEET
TRISTEL ACTIVATOR H SOLUTION

Page: 7

Phrases used in s.2 and s.3: H314: Causes severe skin burns and eye damage.
H335: May cause respiratory irritation.
R36/37/38: Irritating to eyes, respiratory system and skin.

Legend to abbreviations: PNEC = predicted no effect level
DNEL = derived no effect level
LD50 = median lethal dose
LC50 = median lethal concentration
EC50 = median effective concentration
IC50 = median inhibitory concentration
dw = dry weight
bw = body weight
cc = closed cup
oc = open cup
MUS = mouse
GPG = guinea pig
RBT = rabbit
HAM = hamster
HMN = human
MAM = mammal
PGN = pigeon
IVN = intravenous
SCU = subcutaneous
SKN = skin
DRM = dermal
OCC = ocular/corneal
PCP = physico-chemical properties

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.

SAFETY DATA SHEET TRISTEL HYDROSAN SOLUTION

Page: 1

Compilation date: 25/02/2015

Revision date: 12/05/2015

Revision No: 2

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

1.1. Product identifier

Product name: TRISTEL HYDROSAN SOLUTION

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

Use of substance / mixture: To be used in conjunction with Activator H Solution. For professional use only. Uses advised against: Uses other than the intended use of the product

1.3. Details of the supplier of the safety data sheet

Company name: Tristel Solutions Limited

Lynx Business Park

Fordham Road

Newmarket

Cambridgeshire

CB8 7NY

United Kingdom

Tel: +44 (0) 1638 721 500

Fax: +44 (0) 1638 721 911

Email: healthandsafety@tristel.com

1.4. Emergency telephone number

Emergency tel: +44 (0) 1638 721 500

(office hours only)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Skin Irrit. 2: H315; Eye Dam. 1: H318; -: EUH032

Classification under CHIP: Xn: R21; -: R32; Xi: R36

Most important adverse effects: Contact with acids liberates very toxic gas. Causes skin irritation. Causes serious eye damage.

2.2. Label elements

Label elements under CLP:

Hazard statements: EUH032: Contact with acids liberates very toxic gas.

H315: Causes skin irritation.

H318: Causes serious eye damage.

Signal words: Danger

Hazard pictograms: GHS05: Corrosion

SAFETY DATA SHEET
TRISTEL HYDROSAN SOLUTION

Page: 2



Precautionary statements: P280: Wear protective gloves/protective clothing/eye protection.
P302+352: IF ON SKIN: Wash with plenty of soap and 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.

2.3. Other hazards

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

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

SODIUM CHLORITE 100%

EINECS	CAS	CHIP Classification	CLP Classification	Percent
231-836-6	7758-19-2	-	Eye Dam. 1: H318; Ox. Sol. 2: H272; Acute Tox. 4: H302; Acute Tox. 3: H311; Skin Corr. 1B: H314; Aquatic Acute 1: H400; STOT RE 2: H373; -: EUH032	1-10%

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: Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: Wash out mouth with water. Do not induce vomiting. Consult a doctor.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so.

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

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

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

Ingestion: There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Nausea and stomach pain may occur.

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.

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

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

[cont...]

SAFETY DATA SHEET
TRISTEL HYDROSAN SOLUTION

Page: 3

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.

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. Mark out the contaminated area with signs and prevent access to unauthorised personnel. 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.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of mists in the air. Avoid direct contact with the substance.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well ventilated area. Keep container tightly closed. Do not allow product to come into contact with acids.

7.3. Specific end use(s)

Specific end use(s): To be used in conjunction with Activator H Solution. For professional use only.

Section 8: Exposure controls/personal protection

8.1. Control parameters

[cont...]

SAFETY DATA SHEET
TRISTEL HYDROSAN SOLUTION

Page: 4

Hazardous ingredients:

SODIUM CHLORITE 100%

Workplace exposure limits:

Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
EU	-	0.41mg/m ³	-	-

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: Respiratory protection not required.

Hand protection: Protective gloves.

Eye protection: Safety glasses with side-shields. Ensure eye bath is to hand.

Skin protection: Protective clothing.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Colourless

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.

Flammability limits %: lower: No data available.

Flash point °C: No data available.

Autoflammability °C: No data available.

Relative density: No data available.

VOC g/l: No data available.

Melting point/range °C: No data available.

upper: No data available.

Part.coeff. n-octanol/water: No data available.

Vapour pressure: No data available.

pH: 8.2-8.5

9.2. Other information

Other information: No data available.

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.

[cont...]

SAFETY DATA SHEET
TRISTEL HYDROSAN SOLUTION

Page: 5

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. Contact with acids liberates very toxic gas.

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.

Section 11: Toxicological information

11.1. Information on toxicological effects

Relevant effects for mixture:

Effect	Route	Basis
Acute toxicity (harmful)	DRM	Hazardous: calculated
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 pain and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Nausea and stomach pain may occur.

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.

Section 12: Ecological information

12.1. Toxicity

Hazardous ingredients:

SODIUM CHLORITE 100%

Daphnia magna	48H EC50	0.29	mg/l
FISH	96H LC50	265-310	mg/l

12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

[cont...]

SAFETY DATA SHEET
TRISTEL HYDROSAN SOLUTION

Page: 6

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: Readily absorbed into soil. Not classified as environmentally hazardous.

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.

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.

Section 14: Transport information

14.1. UN number

UN number: Not applicable

14.2. UN proper shipping name

Shipping name: NOT CLASSIFIED AS DANGEROUS IN THE MEANING OF TRANSPORT REGULATIONS.

14.3. Transport hazard class(es)

Transport class: Not applicable

14.4. Packing group

Packing group: Not applicable

14.5. Environmental hazards

Environmentally hazardous: No

Marine pollutant: No

14.6. Special precautions for user

Special precautions: No special precautions.

Tunnel code: Not applicable

Transport category: Not applicable

IMDG seg. group: NOT APPLICABLE

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk: Not applicable

[cont...]

SAFETY DATA SHEET
TRISTEL HYDROSAN SOLUTION

Page: 7

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.

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: EUH032: Contact with acids liberates very toxic gas.

H272: May intensify fire; oxidiser.

H302: Harmful if swallowed.

H311: Toxic in contact with skin.

H314: Causes severe skin burns and eye damage.

H315: Causes skin irritation.

H318: Causes serious eye damage.

H373: May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H400: Very toxic to aquatic life.

R21: Harmful in contact with skin.

R32: Contact with acids liberates very toxic gas.

R36: Irritating to eyes.

Legend to abbreviations: PNEC = predicted no effect level

DNEL = derived no effect level

LD50 = median lethal dose

LC50 = median lethal concentration

EC50 = median effective concentration

IC50 = median inhibitory concentration

dw = dry weight

bw = body weight

cc = closed cup

oc = open cup

MUS = mouse

[cont...]

SAFETY DATA SHEET
TRISTEL HYDROSAN SOLUTION

Page: 8

GPG = guinea pig

RBT = rabbit

HAM = hamster

HMN = human

MAM = mammal

PGN = pigeon

IVN = intravenous

SCU = subcutaneous

SKN = skin

DRM = dermal

OCC = ocular/corneal

PCP = physico-chemical properties

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.