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

1.1. Product identifier

Product name: TRISTEL KEEPER

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

Use of substance / mixture: Sodium chlorite solution for fish processing. 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. 1B: H314; -: EUH032
Classification under CHIP: Xn: R21; -: R32; Xi: R38; Xi: R41
Most important adverse effects: Contact with acids liberates very toxic gas. Causes severe skin burns and eye damage.

2.2. Label elements

Label elements under CLP:

Hazard statements: EUH032: Contact with acids liberates very toxic gas.
H314: Causes severe skin burns and eye damage.
Signal words: Danger
Hazard pictograms: GHS05: Corrosion
Precautionary statements:
P280: Wear protective gloves/protective clothing/eye protection.
P303+361+353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower.
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:
SODIUM CHLORITE 100%

<table>
<thead>
<tr>
<th>EINECS</th>
<th>CAS</th>
<th>CHIP Classification</th>
<th>CLP Classification</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>231-836-6</td>
<td>7758-19-2</td>
<td>-</td>
<td>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</td>
<td>1-10%</td>
</tr>
</tbody>
</table>

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. If skin irritation or rash occurs: Get medical advice.

Eye contact: Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

Ingestion: Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. 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. There may be severe pain. The vision may become blurred. May cause permanent damage.

Ingestion: There may be soreness and redness of the mouth and throat. 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...]
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: Mark out the contaminated area with signs and prevent access to unauthorised personnel. Do not attempt to take action without suitable protective clothing - see section 8 of SDS. 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. 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. Do not allow product to come into contact with acids.

7.3. Specific end use(s)

Specific end use(s): Sodium chlorite solution for fish processing. For professional use only.

Section 8: Exposure controls/personal protection

8.1. Control parameters
Hazardous ingredients:

SODIUM CHLORITE 100%

<table>
<thead>
<tr>
<th></th>
<th>State</th>
<th>8 hour TWA</th>
<th>15 min. STEL</th>
<th>8 hour TWA</th>
<th>15 min. STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU</td>
<td>-</td>
<td>-</td>
<td>0.41mg/m3</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

DNEL/PNEC Values

DNEL / PNEC  No data available.

8.2. Exposure controls

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

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency.

Hand protection: Protective gloves.

Eye protection: Tightly fitting safety goggles. 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Pale Yellow</td>
</tr>
<tr>
<td>Odour</td>
<td>Chlorine like</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available.</td>
</tr>
<tr>
<td>Oxidising</td>
<td>No data available.</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>No data available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available.</td>
</tr>
<tr>
<td>Boiling point/range °C</td>
<td>No data available.</td>
</tr>
<tr>
<td>Melting point/range °C</td>
<td>No data available.</td>
</tr>
<tr>
<td>Flash point °C</td>
<td>No data available.</td>
</tr>
<tr>
<td>Part.coef. n-octanol/water</td>
<td>No data available.</td>
</tr>
<tr>
<td>Autoflammability °C</td>
<td>No data available.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available.</td>
</tr>
<tr>
<td>pH</td>
<td>8.5-9.0</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.065-1.095</td>
</tr>
<tr>
<td>VOC g/l</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

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. 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

<table>
<thead>
<tr>
<th>Effect</th>
<th>Route</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity (harmful)</td>
<td>DRM</td>
<td>Hazardous: calculated</td>
</tr>
<tr>
<td>Irritation</td>
<td>OPT DRM</td>
<td>Hazardous: calculated</td>
</tr>
</tbody>
</table>

**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. There may be severe pain. The vision may become blurred. May cause permanent damage.
- **Ingestion:** There may be soreness and redness of the mouth and throat. 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%**

<table>
<thead>
<tr>
<th>Organism</th>
<th>48H EC50</th>
<th>mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daphnia magna</td>
<td>0.29</td>
<td></td>
</tr>
</tbody>
</table>
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

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: UN1908

14.2. UN proper shipping name

Shipping name: CHLORITE SOLUTION

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
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: 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 intensity fire; oxidiser.
H302: Harmful if swallowed.
H311: Toxic in contact with skin.
H314: Causes severe skin burns and eye damage.
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.
R38: Irritating to skin.
R41: Risk of serious damage 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 KEEPER

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 = phycico-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.