

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

1.1. Product identifier

Product name: ZIRCON

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

Use of substance / mixture: Disinfectant 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. 1B: H314; Aquatic Acute 1: H400; -: EUH031

Classification under CHIP: -: R31; C: R34; N: R50

Most important adverse effects: Contact with acids liberates toxic gas. Causes severe skin burns and eye damage. Very toxic to aquatic life.

2.2. Label elements

Label elements under CLP:

Hazard statements: EUH031: Contact with acids liberates toxic gas.

H314: Causes severe skin burns and eye damage.

H400: Very toxic to aquatic life.

Signal words: Danger

Hazard pictograms: GHS05: Corrosion

GHS09: Environmental

SAFETY DATA SHEET

ZIRCON

Page: 2



Precautionary statements: P273: Avoid release to the environment.
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 HYPOCHLORITE SOLUTION CL ACTIVE

EINECS	CAS	CHIP Classification	CLP Classification	Percent
231-668-3	7681-52-9	-	Skin Corr. 1B: H314; Aquatic Acute 1: H400; -: EUH031	10-30%

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. Consult a doctor.

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 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. Exposure may cause coughing or wheezing.

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

ZIRCON

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. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. 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.

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. The floor of the storage room must be impermeable to prevent the escape of liquids.

7.3. Specific end use(s)

Specific end use(s): Disinfectant Solution. For professional use only.

Section 8: Exposure controls/personal protection

[cont...]

SAFETY DATA SHEET

ZIRCON

Page: 4

8.1. Control parameters

Workplace exposure limits: No data available.

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area. The floor of the storage room must be impermeable to prevent the escape of liquids.

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

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: Yellow-green

Odour: Chlorine like

Evaporation rate: No data available.

Oxidising: No data available.

Solubility in water: Soluble

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: 1.2 - 1.3

VOC g/l: No data available.

Melting point/range °C: -17

upper: No data available.

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

Vapour pressure: No data available.

pH: >11.0

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

ZIRCON

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

Toxicity values:

Route	Species	Test	Value	Units
ORAL	RAT	LD50	8910	mg/kg

Hazardous ingredients:

SODIUM HYPOCHLORITE SOLUTION...100% CL ACTIVE

ORL	MUS	LD50	5800	mg/kg
-----	-----	------	------	-------

Relevant effects for mixture:

Effect	Route	Basis
Corrosivity	OPT INH DRM	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. Exposure may cause coughing or wheezing.

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

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values:

Species	Test	Value	Units
FISH	96H LC50	0.01-0.1	mg/l
DAPHNIA	48H EC50	0.01-0.1	mg/l

[cont...]

SAFETY DATA SHEET

ZIRCON

Page: 6

12.2. Persistence and degradability

Persistence and degradability: Not biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: Bioaccumulation potential.

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: Toxic to aquatic organisms. Toxic to soil organisms.

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: UN1791

14.2. UN proper shipping name

Shipping name: HYPOCHLORITE SOLUTION

14.3. Transport hazard class(es)

Transport class: 8

14.4. Packing group

Packing group: III

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: 3

Section 15: Regulatory information

[cont...]

SAFETY DATA SHEET

ZIRCON

Page: 7

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: EUH031: Contact with acids liberates toxic gas.
H314: Causes severe skin burns and eye damage.
H400: Very toxic to aquatic life.
R31: Contact with acids liberates toxic gas.
R34: Causes burns.
R50: Very toxic to aquatic organisms.

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

[cont...]

SAFETY DATA SHEET

ZIRCON

Page: 8

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.