Safety Data Sheet

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and Commission Delegated Regulation (EU) 2023/707, and (EC) No. 1907/2006 (REACH), as amended by Commission Regulation (EU) 2020/878.

Conditioning Buffer

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

1.1 Product identifier

Product Name: Conditioning Buffer
Product code: A00661

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

Relevant identified uses: For Research Use Only.
Uses advised against: Not for Use in Diagnostic Procedures.
Reasons why uses advised against: Not determined or not applicable.

1.3 Details of the manufacturer/supplier of the safety data sheet

Manufacturer:	**Supplier:**
United States	**European Union**
Asuragen, Inc.	Bio-Techne (DRD)
2150 Woodward Street	19 Rue Louis Delourmel
Austin, Texas 78744	35230, Noyal Châtillon sur Seiche
+1 512-681-5200	+33.2.99.35.19.36

1.4 Emergency telephone number:

European Union
Bio-Techne (DRD)
+33.2.99.35.19.36 (Normal business hours)

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture:

Classification according to Regulation (EC) No. 1272/2008 (CLP):

Skin corrosion, category 1B
Serious eye damage, category 1
Specific target organ toxicity - single exposure, category 3, respiratory tract irritation
Acute aquatic hazard, category 1
Chronic aquatic hazard, category 2

Hazard-determining components of labeling:

Zinc chloride

Additional Information: None

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)
Hazard pictograms:

Signal Word: Danger
Hazard statements:

H314 Causes severe skin burns and eye damage
H318 Causes serious eye damage
H335 May cause respiratory irritation
H400 Very toxic to aquatic life

H411 Toxic to aquatic life with long lasting effects

Precautionary statements:

P260 Do not breathe dust, fumes, gas, mist, vapours or spray
P264 Wash any exposed skin thoroughly after handling
P271 Use only outdoors or in a well-ventilated area
P280 Wear protective gloves, protective clothing, eye protection and face protection
P273 Avoid release to the environment
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with shower
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P310 Immediately call a doctor
P321 Specific treatment (see Sections 4-8 of this SDS and any supplemental information on the product label)
P363 Wash contaminated clothing before reuse
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing
P312 Call a POISON CENTER or doctor if you feel unwell
P391 Collect spillage
P405 Store locked up
P403+P233 Store in a well-ventilated place. Keep container tightly closed
P501 Dispose of contents and container in accordance with local, regional, national, and international regulations

2.3 Other hazards: None known

SECTION 3: Composition/information on ingredients

3.1 Substance: Not applicable.

3.2 Mixture:

Identification	EU REACH Registration No.	Name	Classification according to Regulation (EC) No. 1272/2008 (CLP)	Weight %
CAS number: 7646-85-7 EC number: 231-592-0	–	Zinc chloride	Acute Tox. 4 (Oral); H302 Skin Corr. 1B; H314 Aquatic Acute 1; H400 Eye Dam. 1; H318 Aquatic Chronic 1; H410 STOT SE 3 (RI); H335 Specific concentration limit(s): STOT SE 3 (RI); H335: C ≥5% M-Factor: 10 (Acute), 1 (Chronic)	<10

Additional information: None

Full Text of H and EUH statements: See section 16

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes:

Show this Safety Data Sheet to the doctor in attendance.

Following inhalation:

If inhaled, remove person to fresh air and place in a position comfortable for breathing. Keep person at rest. If breathing is difficult, administer oxygen. If breathing has stopped, provide artificial respiration. If experiencing respiratory symptoms, seek medical advice/attention.

Following skin contact:

Treatment is urgent. Seek emergency medical treatment. Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse.

Following eye contact:

Immediately rinse eyes with plenty of gently flowing lukewarm water for 15 minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. Seek immediate medical attention, preferably from an ophthalmologist.

Following ingestion:

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. Seek immediate medical attention.

Self-Protection of the first aider:

Take precautions to ensure your own safety before attempting rescue. Wear appropriate safety eyewear, gloves, protective clothing and respiratory protection to prevent exposure. See Section 8 of this SDS for personal protective equipment recommendations.

4.2 Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Exposure to skin may result in redness, pain, burning, inflammation and tissue damage.
Eye contact may result in irritation, redness, pain, inflammation, itching, burning, tearing, corneal damage and loss of vision.
Exposure via ingestion may result in burns of the mouth and throat, abdominal pain, burning sensation in the throat and chest, nausea, vomiting, shock or collapse.
Exposure via inhalation may result in respiratory tract irritation, cough, sore throat, burning sensation and shortness of breath. Inhalation of high concentrations of Zinc chloride, respirable particles (such as fumes) may cause lung edema, Adult Respiratory Distress Syndrome (ARDS), pulmonary fibrosis and death.

Delayed symptoms and effects:

Effects are dependent on exposure (dose, concentration, contact time).

4.3 Indication of any immediate medical attention and special treatment needed

Specific treatment:

In case of eye contact, seek prompt medical attention while rinsing is continued.
In case of skin contact, seek prompt medical attention while rinsing is continued.
In case of ingestion, seek prompt medical attention.
If respiratory symptoms persist, seek medical attention.

Notes for the doctor:

Treat symptomatically. The symptoms of lung edema often do not become manifest until a few hours have passed and are aggravated by physical effort. Therefore, rest and medical observation are

indicated.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:

Water mist/fog, carbon dioxide, dry chemical or alcohol resistant foam.

Unsuitable extinguishing media:

Do not use water jet.

5.2 Special hazards arising from the substance or mixture:

Thermal decomposition may produce toxic and corrosive fumes/gases including hydrogen chloride and zinc oxide.

5.3 Advice for firefighters

Personal protection equipment:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full-face piece operated in positive pressure mode.

Special precautions:

Avoid contact with skin, eyes, hair and clothing. Do not breathe fumes/gas/mists/aerosols/vapors/dusts. Move containers from fire area if safe to do so. Use water spray/fog for cooling fire exposed containers. Avoid unnecessary run-off of extinguishing media which may cause pollution.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. Wear recommended personal protective equipment (see Section 8). Avoid contact with skin, eyes and clothing. Avoid breathing mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling.

6.2 Environmental precautions:

Prevent further leakage or spillage if safe to do so. Prevent from reaching drains, sewers and waterways. Discharge into the environment must be avoided.

6.3 Methods and material for containment and cleaning up:

Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Stop leak if you can do it without risk. Contain and collect spillage and place in suitable container for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

6.4 Reference to other sections:

For personal protective equipment see Section 8. For disposal see Section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling:

Use appropriate personal protective equipment (see Section 8). Prevent skin contact. Do not get in eyes. Use only with adequate ventilation. Do not add water to the corrosive product. If it is necessary to mix a corrosive product with water, do so slowly adding the corrosive to cold water, in small amounts, and stir frequently. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use. Keep only in original packaging.

7.2 Conditions for safe storage, including any incompatibilities:

Store in cool, dry, well-ventilated location out of direct sunlight and away from exit paths. Store in a corrosion-resistant container with a resistant inner liner. Inspect containers and storage area regularly

for signs of leak and damage. Store containers at a convenient height for handling, below eye level if possible. High shelving increases the risk of dropping containers, personal injury and exposure. Ensure that appropriate fire fighting and spill-clean up equipment is readily available. Keep away from food and beverages. Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Store separately. Keep container tightly sealed. Store away from incompatible materials (See Section 10).

7.3 Specific end use(s):

Refer to Section 1 (Recommended Use).

SECTION 8: Exposure controls/personal protection




8.1 Control parameters

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
Estonia	Zinc chloride	7646-85-7	8-Hour TWA: 1 mg/m³ (respirable dust)
Czech Republic	Zinc chloride	7646-85-7	Ceiling Limit: 2 mg/m³
	Zinc chloride	7646-85-7	8-Hour TWA: 1 mg/m³ (fume)
United Kingdom	Zinc chloride	7646-85-7	8-Hour TWA: 1 mg/m³ (fume)
	Zinc chloride	7646-85-7	15-Minute STEL: 2 mg/m³ (fume)
Lithuania	Zinc chloride	7646-85-7	8-Hour TWA: 1 mg/m³ (respirable fraction)
Croatia	Zinc chloride	7646-85-7	15-Minute STEL: 2 mg/m³ (fume)
	Zinc chloride	7646-85-7	8-Hour TWA: 1 mg/m³ (fume)
Denmark	Zinc chloride	7646-85-7	15-Minute STEL: 1 mg/m³ (fume)
	Zinc chloride	7646-85-7	8-Hour TWA: 0.5 mg/m³ (fume)
Italy	Zinc chloride	7646-85-7	8-Hour TWA: 1 mg/m³ (fume (ACGIH))
	Zinc chloride	7646-85-7	15-Minute STEL: 2 mg/m³ (fume (ACGIH))
Germany (MAK)	Zinc chloride	7646-85-7	8-Hour TWA: 2 mg/m³ (inhalable fraction (as Zinc, inorganic compounds)
	Zinc chloride	7646-85-7	8-Hour TWA: 0.1 mg/m³ (respirable fraction (as Zinc, inorganic compounds))
	Zinc chloride	7646-85-7	Ceiling Limit: 2 mg/m³ (inhalable fraction)
Sweden	Zinc chloride	7646-85-7	8-Hour TWA: 1 mg/m³ (respirable fraction)

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
France	Zinc chloride	7646-85-7	8-Hour TWA: 1 mg/m³ (fume)
Spain	Zinc chloride	7646-85-7	8-Hour TWA: 1 mg/m³ (fume)
	Zinc chloride	7646-85-7	15-Minute STEL: 2 mg/m³ (fume)
Ireland	Zinc chloride	7646-85-7	8-Hour TWA: 1 mg/m³ (fume)
	Zinc chloride	7646-85-7	15-Minute STEL: 2 mg/m³ (fume)
Greece	Zinc chloride	7646-85-7	8-Hour TWA: 1 mg/m³ (fume)
	Zinc chloride	7646-85-7	15-Minute STEL: 2 mg/m³ (fume)
Finland	Zinc chloride	7646-85-7	8-Hour TWA: 1 mg/m³ (fume)
Portugal	Zinc chloride	7646-85-7	8-Hour TWA: 1 mg/m³ (fume)
	Zinc chloride	7646-85-7	15-Minute STEL: 2 mg/m³ (fume)
Belgium	Zinc chloride	7646-85-7	8-Hour TWA: 1 mg/m³ (fume)
	Zinc chloride	7646-85-7	15-Minute STEL: 2 mg/m³ (fume)
Poland	Zinc chloride	7646-85-7	8-Hour TWA: 1 mg/m³ (inhalable fraction)
	Zinc chloride	7646-85-7	15-Minute STEL: 2 mg/m³ (inhalable fraction)
Hungary	Zinc chloride	7646-85-7	8-Hour TWA: 1 mg/m³ (respirable fraction)

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Derived No Effect Level (DNEL):

Ingredient Name: Zinc chloride

CAS #: 7646-85-7

Workers - Systemic Effects	Acute - Oral	Not determined or not applicable.
	Acute - Inhalation	No hazard identified
	Acute - Dermal	No hazard identified
	Chronic - Oral	Not determined or not applicable.
	Chronic - Inhalation	No hazard identified
	Chronic - Dermal	No hazard identified
Workers - Local Effects	Acute - Oral	Not determined or not applicable.
	Acute - Inhalation	Hazard identified but no DNEL available
	Acute - Dermal	Hazard identified but no DNEL available
	Chronic - Oral	Not determined or not applicable.
	Chronic - Inhalation	Hazard identified but no DNEL available
	Chronic - Dermal	Hazard identified but no DNEL available

General Population - Systemic Effects	Acute - Oral	No hazard identified
	Acute - Inhalation	No hazard identified
	Acute - Dermal	No hazard identified
	Chronic - Oral	No hazard identified
	Chronic - Inhalation	No hazard identified
	Chronic - Dermal	No hazard identified
General Population - Local Effect	Acute - Oral	Not determined or not applicable.
	Acute - Inhalation	Hazard identified but no DNEL available; Hazard identified but no DNEL available
	Acute - Dermal	Not determined or not applicable.
	Chronic - Oral	Not determined or not applicable.
	Chronic - Inhalation	Hazard identified but no DNEL available; Hazard identified but no DNEL available
	Chronic - Dermal	Not determined or not applicable.

Predicted No Effect Concentration (PNEC):
Ingredient Name: Zinc chloride
CAS #: 7646-85-7

Environmental Protection Target	PNEC
Fresh water	30 µg/L
Freshwater sediments	306.2 mg/kg sediment dw
Marine water	15 µg/L
Marine sediments	338.1 mg/kg sediment dw
Microorganisms in sewage treatment	208.4 µg/L
Soil (agricultural)	173.2 mg/kg soil dw
Air	No hazard identified
Oral (Secondary Poisoning)	No exposure expected

Information on monitoring procedures:
Not determined or not applicable.

8.2 Exposure controls

Appropriate engineering controls:
Emergency eye wash stations and safety showers should be available in the immediate vicinity of use or handling. Provide adequate ventilation to maintain the airborne concentrations of vapor, mists, and/or dusts below the applicable workplace exposure limits, while observing recognized national standards (or equivalent).

Personal protection equipment

Eye and face protection:
Use safety glasses with side shields or goggles. Consider the use of a face shield for splash protection. Use eye protection equipment that has been tested and approved by recognized national standards (or equivalent).

Skin and body protection:
Chemical resistant, impervious gloves approved by the appropriate standards. Gloves must be inspected prior to use. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Avoid skin contact with used gloves. Appropriate techniques should be used to remove used gloves and contaminated clothing. Full body protection should be worn. Personal protective

equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Ensure that all personal protective equipment is approved by recognized national standards (or equivalent).

Respiratory protection:

If engineering controls do not maintain airborne concentrations below the applicable workplace exposure limits, or to an acceptable level (if exposure limits have not been established), a respirator approved by recognized national standards (or equivalent) must be worn. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

General hygienic measures:

When handling chemical products, do not eat, drink or smoke. Wash hands after handling, before breaks, and at the end of the workday. Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reuse. Perform routine housekeeping.

Environmental exposure controls:

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Product (substance / mixture) related measures to prevent exposure:	Not determined or not applicable.
Instruction measures to prevent exposure:	Not determined or not applicable.
Organisational measures to prevent exposure:	Not determined or not applicable.
Technical measures to prevent exposure:	Not determined or not applicable.

Risk management measures to control exposure:

Not determined or not applicable.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid
Color	Colourless
Odor/Odor threshold	Not determined or not available.
pH	3.95 – 4.05
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Not determined or not available.
Flash point (closed cup)	Not determined or not available.
Flammability	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	Not determined or not available.
Relative vapor density	Not determined or not available.
Density	Not determined or not available.
Relative density	Not determined or not available.
Solubilities	Not determined or not available.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.

Kinematic viscosity	Not determined or not available.
Particle characteristics	Not determined or not available.

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Explosives	No data available/Not applicable
Flammable gases	No data available/Not applicable
Aerosols	No data available/Not applicable
Oxidizing gases	No data available/Not applicable
Gases under pressure	No data available/Not applicable
Flammable liquids	No data available/Not applicable
Flammable solids	No data available/Not applicable
Self-reactive substances and mixtures	No data available/Not applicable
Pyrophoric liquids	No data available/Not applicable
Pyrophoric solids	No data available/Not applicable
Self-heating substances and mixtures	No data available/Not applicable
Substances and mixtures, which emit flammable gases in contact with water	No data available/Not applicable
Oxidizing liquids	No data available/Not applicable
Oxidizing solids	No data available/Not applicable
Organic peroxides	No data available/Not applicable
Corrosive to metals	No data available/Not applicable
Desensitized explosives	No data available/Not applicable

9.2.2 Other safety characteristics

None.

SECTION 10: Stability and reactivity

10.1 Reactivity:

Not reactive under recommended handling and storage conditions.

10.2 Chemical stability:

Stable under recommended handling and storage conditions.

10.3 Possibility of hazardous reactions:

Zinc chloride reacts violently with strong oxidants and strong bases.

10.4 Conditions to avoid:

Avoid generation of aerosols and mists, extreme heat, open flames, hot surfaces, sparks, ignition sources and incompatible materials.

10.5 Incompatible materials:

Strong acids; Strong base; Oxidizing agents

10.6 Hazardous decomposition products:

Thermal decomposition products include hydrogen chloride and zinc oxide.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

Route	Result
Oral ATE	LD50 Rat: 11,000 mg/kg

Substance data:

Name	Route	Result
Zinc chloride	oral	LD50 Rat: 1100 mg/kg
	dermal	LD50 Rat: >2000 mg/kg

Skin corrosion/irritation

Assessment:

Causes severe skin burns and eye damage.

Product data:

No data available.

Substance data:

Name	Result
Zinc chloride	Causes severe skin burns.

Serious eye damage/irritation

Assessment:

Causes serious eye damage.

Product data:

No data available.

Substance data:

Name	Result
Zinc chloride	Causes serious eye damage.

Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC): None of the ingredients are listed.

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Reproductive Toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Specific target organ toxicity (single exposure)

Assessment:

May cause respiratory irritation.

Product data:

No data available.

Substance data:

Name	Result
Zinc chloride	May cause respiratory irritation.

Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Endocrine disrupting properties:

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Information on likely routes of exposure:

Inhalation; Ingestion; Skin contact; Eye contact

Symptoms related to the physical, chemical and toxicological characteristics:

See section 4 of this SDS.

11.2 Information on other hazards

Other information:

No data available.

SECTION 12: Ecological information

12.1 Toxicity

Acute (short-term) toxicity

Assessment:

Very toxic to aquatic life.

Product data: No data available

Substance data:

Name	Result
Zinc chloride	Fish LC50 Oncorhynchus mykiss: 0.169 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: 2.14 mg/L (48 hr [mobility, Read-across substance data])
	Aquatic Plants EC50 Pseudokirchneriella subcapitata: 0.08 mg/L (72 hr [growth rate, Read-across substance data])

Chronic (long-term) toxicity

Assessment:

Toxic to aquatic life with long lasting effects.

Product data: No data available

Substance data:

Name	Result
Zinc chloride	Fish NOEC Oncorhynchus mykiss: 0.199 mg/L (30 d [mortality])
	Aquatic Invertebrates NOEC Daphnia magna: 0.039 mg/L (21 d [reproduction])

12.2 Persistence and degradability

Product data: No data available

Substance data:

Name	Result
Zinc chloride	Persistence assessment based on biodegradability is not relevant inorganic compounds such as this substance.

12.3 Bioaccumulative potential

Product data: No data available

Substance data:

Name	Result
Zinc chloride	Bioaccumulation assessment using a classic BCF assessment is not considered relevant for inorganic compounds such as this substance.

12.4 Mobility in soil

Product data: No data available

Substance data:

Name	Result
Zinc chloride	Mobility in soil assessment based on KOC/Kd values are not relevant for inorganic compounds such as this substance.

12.5 Persistent, bioaccumulative and toxic (PBT) or very persistent, very bioaccumulative (vPvB) properties

PBT Properties

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available

Substance data:

Zinc chloride	PBT assessment does not apply to inorganic substances.

vPvB Properties

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available

Substance data:

Zinc chloride	vPvB assessment does not apply to inorganic substances.

12.6 Persistent, mobile and toxic (PMT) or very persistent, very mobile (vPvM) properties

PMT Properties

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available

Substance data: No data available

vPvM Properties

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available

Substance data: No data available

12.7 Endocrine disrupting properties

Assessment: Based on available data, the classification criteria are not met.

Product data:
No data available

Substance data: No data available

12.8 Other adverse effects: No data available.

12.9 Hazard to the ozone layer

Assessment: Based on available data, the classification criteria are not met.
Product data: No data available
Substance data: No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

13.1.1 Product / Packaging disposal:
Dispose of in accordance with all applicable local, regional, state and federal regulations.

Waste codes / waste designations according to LoW: Not determined or not available.

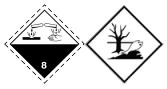
13.1.2 Waste treatment-relevant information: Not determined or not available.

13.1.3 Sewage disposal-relevant information: Not determined or not available.

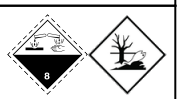
13.1.4 Other disposal recommendations: It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

SECTION 14: Transport information

International Carriage of Dangerous Goods by Road/Rail (ADR/RID)

UN number or ID number	1840
UN proper shipping name	ZINC CHLORIDE SOLUTION
UN transport hazard class(es)	8 
Packing group	III
Environmental hazards	Marine Pollutant
Special precautions for user	None
Classification code	C1
Tank code	L4BN
Transport category	3
Tunnel restriction code	(E)
Hazard identification	80
Excepted quantities	E1
Limited quantity	5 L

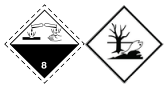
International Carriage of Dangerous Goods by Inland Waterways (ADN)

UN number or ID number	1840
UN proper shipping name	ZINC CHLORIDE SOLUTION
UN transport hazard class(es)	8 
Packing group	III

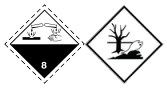
Conditioning Buffer

Environmental hazards	Marine Pollutant
Special precautions for user	None
Excepted quantities	E1
Limited quantity	5 L

International Maritime Dangerous Goods (IMDG)

UN number or ID number	1840
UN proper shipping name	ZINC CHLORIDE SOLUTION
UN transport hazard class(es)	8 
Packing group	III
Environmental hazards	Marine Pollutant
Special precautions for user	None
EMS number	F-A, S-B
Stowage category	A
Excepted quantities	E1
Limited quantity	5 L

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number or ID number	1840
UN proper shipping name	Zinc chloride solution
UN transport hazard class(es)	8 
Packing group	III
Environmental hazards	Marine Pollutant
Special precautions for user	None
ERG code	8L
Excepted quantities	E2
Passenger and cargo	5 L
Cargo aircraft only	60 L
Limited quantity	1 L

Maritime Transport in Bulk according to IMO Instruments

Bulk Name	None
Ship type	None
Pollution category	None
IMO hazard class	None
Environmental hazards	None
Material hazardous only in bulk	None
Cargo Group	None

SECTION 15: Regulatory information

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

European regulations

Inventory listing (EINECS): All ingredients are listed or exempt.

REACH SVHC candidate list: None of the ingredients are listed.

REACH SVHC Authorizations: None of the ingredients are listed.

REACH Restriction: All ingredients are listed or exempt.

Water hazard class (WGK) (Product): Not determined.

Water hazard class (WGK) (Substance):

Ingredient Name	CAS	Class
Zinc chloride	7646-85-7	Water hazard class 3: highly hazardous to water

Other regulations

Germany TA Luft: None of the ingredients are listed.

Additional information: Not determined.

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: Other information

Abbreviations and Acronyms: None

Classification procedure:

Classification according to Regulation (EC) No. 1272/2008 (CLP)	Method Used
Skin corrosion, category 1B	Calculation method
Serious eye damage, category 1	Calculation method
Specific target organ toxicity - single exposure, category 3, respiratory tract irritation	Calculation method
Acute aquatic hazard, category 1	Calculation method
Chronic aquatic hazard, category 2	Calculation method

Summary of classification(s) in section 3:

Acute Tox. 4 (Oral)	Acute toxicity (oral), category 4
Skin Corr. 1B	Skin corrosion, category 1B
Aquatic Acute 1	Acute aquatic hazard, category 1
Eye Dam. 1	Serious eye damage, category 1
Aquatic Chronic 1	Chronic aquatic hazard, category 1
STOT SE 3 (RI)	Specific target organ toxicity - single exposure, category 3, respiratory tract irritation

Summary of hazard statements in section 3:

H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H400	Very toxic to aquatic life
H318	Causes serious eye damage
H410	Very toxic to aquatic life with long lasting effects
H335	May cause respiratory irritation

Disclaimer:

This product has been classified in accordance with EC No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and Commission Delegated Regulation (EU) 2023/707, and EC No. 1907/2006 (REACH), as amended by Commission

Regulation (EU) 2020/878. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation, and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

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End of Safety Data Sheet