

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Chlorozinc solution, 25 ml

Print date: 14.04.2015

Product code: 9991234

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Chlorozinc solution, 25 ml

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

Laboratory chemicals

1.3. Details of the supplier of the safety data sheet**Seller**

Company name: CONATEX-DIDACTIC Lehrmittel GmbH
Street: Im Forstgarten 1
Place: D-66459 Kirkel
Internet: www.conatex.com

Supplier

Company name: Carbolution Chemicals GmbH
Street: Im Stadtwald, Gebäude A1.2
Place: D-66123 Saarbrücken
Contact person: Dr. Michael Bauer Telephone: +49 (0)681 302-71232
e-mail: michael.bauer@carbolution-chemicals.de
Internet: www.carbolution-chemicals.de

1.4. Emergency telephone number: +49 (0)681 302-71232**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification according to Directive 67/548/EEC or 1999/45/EC**

Indications of danger: C - Corrosive, Xn - Harmful, N - Dangerous for the environment
R phrases:
Harmful if swallowed.
Causes burns.
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

Hazard categories:
Acute toxicity: Acute Tox. 4
Skin corrosion/irritation: Skin Corr. 1B
Serious eye damage/eye irritation: Eye Dam. 1
Specific target organ toxicity - single exposure: STOT SE 3
Hazardous to the aquatic environment: Aquatic Acute 1
Hazardous to the aquatic environment: Aquatic Chronic 1
Hazard Statements:
Harmful if swallowed.
Causes severe skin burns and eye damage.
May cause respiratory irritation.
Very toxic to aquatic life with long lasting effects.

2.2. Label elements**Hazardous components which must be listed on the label**

zinc chloride
Potassium iodide

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Signal word:

Danger

Pictograms:

GHS05-GHS07-GHS09



Hazard statements

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

Precautionary statements

- P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER/doctor.
 P501 Dispose of contents/container to

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
REACH No		
231-592-0	zinc chloride	25 - < 30 %
7646-85-7	C - Corrosive, Xn - Harmful, N - Dangerous for the environment R22-34-50-53	
030-003-00-2	Acute Tox. 4, Skin Corr. 1B, Aquatic Acute 1 (M-Factor = 1), Aquatic Chronic 1 (M-Factor = 1); H302 H314 H400 H410	
231-659-4	Potassium iodide	1 - < 5 %
7681-11-0	Xn - Harmful, Xi - Irritant R22-36/38	
	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2; H302 H315 H319	
231-442-4	iodine	< 1 %
7553-56-2	Xn - Harmful, N - Dangerous for the environment R20/21-50	
053-001-00-3	Acute Tox. 4, Acute Tox. 4, Aquatic Acute 1 (M-Factor = 1); H332 H312 H400	

Full text of R-, H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Provide fresh air.

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After contact with skin

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Potential hazards: Gastric perforation. Call a physician immediately. Do not allow a neutralisation agent to be drunk.

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

No data available

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

The product itself does not burn.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Advice on protection against fire and explosion

Only use the material in places where open light, fire and other flammable sources can be kept away.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations.

SECTION 8: Exposure controls/personal protection

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8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
7553-56-2	Iodine	-	-		TWA (8 h)	WEL
		0.1	1.1		STEL (15 min)	WEL
7646-85-7	Zinc chloride, fume	-	1		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Eye/face protection

Eye protection: Tightly sealed safety glasses. German Industry Norms (DIN) / European Norms (EN): DIN EN 166

Hand protection

Hand protection: Single-use gloves. Before using check leak tightness / impermeability. Use gloves only once. German Industry Norms (DIN) / European Norms (EN): DIN EN 374

Skin protection

Body protection: Lab apron. Only wear fitting, comfortable and clean protective clothing.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Suitable respiratory protective equipment: particulates filter device (DIN EN 143).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid
 Colour:
 Odour: No data available

Test method

pH-Value: No data available

Changes in the physical state

Initial boiling point and boiling range: No data available
 Sublimation point: No data available
 Softening point: No data available
 Flash point: No data available

Flammability

Solid: No data available
 Gas: No data available

Lower explosion limits: No data available
 Upper explosion limits: No data available

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Ignition temperature:	No data available
Auto-ignition temperature	
Solid:	No data available
Gas:	No data available
Vapour pressure:	No data available
Vapour pressure:	No data available
Density:	No data available
Water solubility:	No data available
Partition coefficient:	No data available
Viscosity / dynamic:	No data available
Viscosity / kinematic:	No data available
Flow time:	No data available
Vapour density:	No data available
Evaporation rate:	No data available
Solvent separation test:	No data available
Solvent content:	No data available

9.2. Other information

Solid content:	No data available
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SECTION 10: Stability and reactivity**10.1. Reactivity**

No data available

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to avoid

No data available

10.5. Incompatible materials

Oxidizing agents, strong.

10.6. Hazardous decomposition products

No data available

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Toxicokinetics, metabolism and distribution**

Toxicological data are not available.

Acute toxicity

Acute oral toxicity.

ATEmix calculated

ATE (oral) 1315,3 mg/kg

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CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
7646-85-7	zinc chloride				
	oral	LD50	350 mg/kg	Ratte	
7681-11-0	Potassium iodide				
	oral	ATE	500 mg/kg		
7553-56-2	iodine				
	oral	LD50	14000 mg/kg	Ratte	
	dermal	ATE	1100 mg/kg		
	inhalative vapour	ATE	11 mg/l		
	inhalative aerosol	ATE	1,5 mg/l		

Irritation and corrosivity

Causes severe skin burns and eye damage. If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects).

Sensitising effects

No data available

Severe effects after repeated or prolonged exposure

No data available

Carcinogenic/mutagenic/toxic effects for reproduction

Due to missing data no statement can be made whether the substance fulfills the criteria of CMR categories 1 or 2. Practical experiences do not give any evidence for CMR activity of categories 1 or 2.

Specific effects in experiment on an animal

No data available

Additional information on tests

This mixture is classified as hazardous according to 1999/45/EC.

Practical experience

Observations relevant to classification

No data available

SECTION 12: Ecological information

12.1. Toxicity

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source
7646-85-7	zinc chloride					
	Acute fish toxicity	LC50	38 mg/l	96 h	Danio rerio	
	Acute crustacea toxicity	EC50	0,33 mg/l	48 h	Daphnia magna	
7553-56-2	iodine					
	Acute fish toxicity	LC50	0,53 mg/l	96 h	Onchorhynchus mykiss	
	Acute crustacea toxicity	EC50	1,63 mg/l	48 h	Daphnia magna	

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

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Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
7553-56-2	iodine	2,49

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

No data available

12.6. Other adverse effects

No data available

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Waste disposal number of waste from residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals
Classified as hazardous waste.

Waste disposal number of used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals
Classified as hazardous waste.

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by dangerous substances
Classified as hazardous waste.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

<u>14.1. UN number:</u>	UN 1840
<u>14.2. UN proper shipping name:</u>	ZINC CHLORIDE SOLUTION
<u>14.3. Transport hazard class(es):</u>	8
<u>14.4. Packing group:</u>	III
Hazard label:	8
Classification code:	C1
Limited quantity:	5 L
Transport category:	3
Hazard No:	80
Tunnel restriction code:	E

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Other applicable information (land transport)

E1

Inland waterways transport (ADN)

14.1. UN number: UN 1840
14.2. UN proper shipping name: ZINC CHLORIDE SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: III
 Hazard label: 8
 Classification code: C1
 Limited quantity: 5 L

Other applicable information (inland waterways transport)

E1

Marine transport (IMDG)

14.1. UN number: UN 1840
14.2. UN proper shipping name: ZINC CHLORIDE SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: III
 Hazard label: 8
 Special Provisions: 223
 Limited quantity: 5 L
 EmS: F-A, S-B

Other applicable information (marine transport)

E1

Air transport (ICAO)

14.1. UN number: UN 1840
14.2. UN proper shipping name: ZINC CHLORIDE SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: III
 Hazard label: 8
 Special Provisions: A3 A803
 Limited quantity Passenger: 1 L
 IATA-packing instructions - Passenger: 852
 IATA-max. quantity - Passenger: 5 L
 IATA-packing instructions - Cargo: 856
 IATA-max. quantity - Cargo: 60 L

Other applicable information (air transport)

E1

: Y841

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

SECTION 15: Regulatory information

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

EU regulatory information

Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

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National regulatory information

Water contaminating class (D): 3 - highly water contaminating

SECTION 16: Other information**Relevant R-phrases (Number and full text)**

- | | |
|-------|---|
| 20/21 | Harmful by inhalation and in contact with skin. |
| 22 | Harmful if swallowed. |
| 34 | Causes burns. |
| 36/38 | Irritating to eyes and skin. |
| 50 | Very toxic to aquatic organisms. |
| 53 | May cause long-term adverse effects in the aquatic environment. |

Relevant H- and EUH-phrases (Number and full text)

- | | |
|------|---|
| H302 | Harmful if swallowed. |
| H312 | Harmful in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)