

Safety Data Sheet

according to UK REACH Regulation

INWACIDE C-3612

Revision: 03.02.2025

Product code: 20200518C3612

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

INWACIDE C-3612

UFI: Y9F7-DRTQ-RR15-5F0C

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

Water treatment chemicals

Uses advised against

No information available.

1.3. Details of the supplier of the safety data sheet

Company name:	INWATEC GmbH & Co. KG	
Street:	Römerstrasse 131 - 133	
Place:	D-50127 Bergheim	
Telephone:	+49 (0) 2271 / 995510	Telefax: +49 (0) 2271 / 9955150
E-mail:	info@inwatec.com	
Contact person:	Anwendungstechnik SDB	
Internet:	www.inwatec.com	
Responsible Department:	Abteilung: Anwendungstechnik	
	E-Mail: info@inwatec.com	

1.4. Emergency telephone number:

Germany: +49 (0) 2271/995510 Mon-Fri: 9:00 - 16:00

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****GB CLP Regulation**

Met. Corr. 1; H290
Skin Corr. 1C; H314
Eye Dam. 1; H318
Skin Sens. 1; H317
Aquatic Acute 1; H400
Aquatic Chronic 1; H410

Full text of hazard statements: see SECTION 16.

2.2. Label elements**GB CLP Regulation****Hazard components for labelling**

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

Signal word: Danger**Pictograms:****Hazard statements**

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H410	Very toxic to aquatic life with long lasting effects.

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Precautionary statements

P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or 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.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P391	Collect spillage.

Additional advice on labelling

The product is classified and labelled according to EC directives or corresponding national laws.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Formulation of preparations (mixtures)

Relevant ingredients

CAS No	Chemical name	Quantity
	EC No	Index No
	REACH No	
	Classification (GB CLP Regulation)	
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	0.6 - < 5 %
	-	613-167-00-5
		01-2120764691-48
	Acute Tox. 2, Acute Tox. 2, Acute Tox. 3, Skin Corr. 1C, Eye Dam. 1, Skin Sens. 1A, Aquatic Acute 1, Aquatic Chronic 1; H330 H310 H301 H314 H318 H317 H400 H410 EUH071	

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
55965-84-9	-	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	0.6 - < 5 %
		inhalation: ATE = 0,5 mg/l (vapours); inhalation: ATE = 0,05 mg/l (dusts or mists); dermal: ATE = 50 mg/kg; oral: ATE = 100 mg/kg Skin Corr. 1C; H314: >= 0,6 - 100 Skin Irrit. 2; H315: >= 0,06 - < 0,6 Eye Dam. 1; H318: >= 0,6 - 100 Eye Irrit. 2; H319: >= 0,06 - < 0,6 Skin Sens. 1A; H317: >= 0,0015 - 100 Aquatic Acute 1; H400: M=100 Aquatic Chronic 1; H410: M=100	

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated, saturated clothing immediately.

After inhalation

Provide fresh air.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap.

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After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. Consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Call a physician immediately.

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

No information available.

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

Treat symptomatically.

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

Water. Foam. ABC powder. Carbon dioxide.

Unsuitable extinguishing media

No information available.

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Thermal decomposition can lead to the escape of irritating gases and vapours.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Collect in closed and suitable containers for disposal.

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

Wear personal protection equipment.

For non-emergency personnel

No information available.

For emergency responders

No information available.

6.2. Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers). Do not contaminate water with the product or its container (Do not clean application equipment near surface water/ Avoid contamination via drains from farmyards and roads).

6.3. Methods and material for containment and cleaning up**For containment**

No information available.

For cleaning up

No information available.

Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

Rinse off residues with water.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

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7.1. Precautions for safe handling**Advice on safe handling**

If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means.

The substance should only be handled in closed apparatus or systems.

Avoid: generation/formation of aerosols, Product heating.

Advice on protection against fire and explosion

No data available

Advice on general occupational hygiene

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, drink, smoke, sniff.

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

Keep/Store only in original container. Prevent penetration into the ground safely.

Hints on joint storage

Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions

Conditions to avoid: frost, heat.

Protect from direct sunlight.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Additional advice on limit values**

To date, no national critical limit values exist.

8.2. Exposure controls**Individual protection measures, such as personal protective equipment****Eye/face protection**

Tightly sealed safety glasses.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Chemical-resistant protective gloves (EN 374), Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time to EN 374), eg. B. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), polyvinyl chloride (0.7 mm), etc. .. Because of the large variety of types, the instructions for use of the manufacturer must be observed.

Skin protection

The wearing of closed work clothing is recommended.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Environmental exposure controls

Do not allow uncontrolled discharge of product into the environment.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid	
Colour:	colourless - light yellow	
Odour:	characteristic	
Odour threshold:	No data available	
		Test method
Melting point/freezing point:	- 2 °C	DIN 51532
Boiling point or initial boiling point and boiling range:	ca. 100 °C	DIN 3405
Lower explosion limits:	No data available	
Upper explosion limits:	No data available	
Flash point:	No data available	
Auto-ignition temperature:	No data available	
Decomposition temperature:	No data available	
pH-Value (at 20 °C):	3 - 4	DIN 19261
Viscosity / kinematic:	No data available	
Water solubility: (at 25 °C)	miscible	
Solubility in other solvents	No data available	
Dissolution rate:	No data available	
Partition coefficient n-octanol/water:	No data available	
Vapour pressure:	No data available	
Density (at 25 °C):	ca. 1,0 g/cm ³	DIN 53479
Relative density:	No data available	

9.2. Other information

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

The classification criteria for the property 'Corrosive to metals' according to Annex I Number 2.16 CLP Regulation are fulfilled. (S 5774)

10.2. Chemical stability

Before application, the product should not be diluted or mixed with other chemicals to avoid negative effects on the active substance.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

No hazardous reaction when handled and stored according to provisions.

10.5. Incompatible materials

Oxidizing agents. Alkali metals. Acid. Reducing agent Alkalis (alkalis).

10.6. Hazardous decomposition products

The product is chemically stable under recommended conditions of storage, use and temperature.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

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Acute toxicity

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

ATEmix tested

	Dose	Species	Source
LD50, oral	> 2000 mg/kg	Rat	OECD 401
LD50, dermal	> 5000 mg/kg	Rat	OECD 402

ATEmix calculated

ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)				
	oral	ATE 100 mg/kg			
	dermal	ATE 50 mg/kg			
	inhalation vapour	ATE 0,5 mg/l			
	inhalation dust/mist	ATE 0,05 mg/l			

Irritation and corrosivity

Skin corrosion/irritation: Causes severe skin burns and eye damage.

Serious eye damage/eye irritation: Causes serious eye damage.

Sensitising effects

May cause an allergic skin reaction. (reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1))

Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

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

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

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

11.2. Information on other hazards

Endocrine disrupting properties

No information available.

Further information

No information available.

SECTION 12: Ecological information

12.1. Toxicity

Very toxic to aquatic life.

Very toxic to aquatic life with long lasting effects.

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)					
	Acute fish toxicity	LC50 mg/l	0,22	96 h	Onchorhynchus mykiss	
	Acute algae toxicity	ErC50 mg/l	0,63	72 h	Pseudokirchneriella subcapitata	
	Acute crustacea toxicity	EC50 mg/l	0,0052	48 h	Daphnie	
	Fish toxicity	NOEC mg/l	0,098	28 d	Onchorhynchus mykiss	
	Algae toxicity	NOEC mg/l	0,0012	3 d	Pseudokirchneriella subcapitata	
	Crustacea toxicity	NOEC mg/l	0,004	21 d	Daphnie	
	Acute bacteria toxicity	EC50 mg/l ()	7,92	3 h	Pseudomonas putida	

12.2. Persistence and degradability

Technically correct releases of minimal concentrations to adapted biological sewage treatment facility, will not disturb the biodegradability of activated sludge.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)			
	OECD 301 D Closed-Bottle-Test	> 60 %		
	OECD A: Activated Sludge Units	> 80 %		

12.3. Bioaccumulative potential

An accumulation in organisms is not to be expected.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	< 0,71

BCF

CAS No	Chemical name	BCF	Species	Source
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	3,16		

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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Disposal recommendations

- Do not allow to enter into surface water or drains.
- Dispose of contents/container to an appropriate recycling or disposal facility.
- Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.
- Send to a hazardous waste incinerator facility under observation of official regulations.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself. Contaminated packages must be completely emptied and can be re-used following proper cleaning. Packing which cannot be properly cleaned must be disposed of.

SECTION 14: Transport information

Land transport (ADR/RID)

<u>14.1. UN number or ID number:</u>	UN 3265
<u>14.2. UN proper shipping name:</u>	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1))
<u>14.3. Transport hazard class(es):</u>	8
<u>14.4. Packing group:</u>	III
Hazard label:	8
Classification code:	C3
Special Provisions:	274
Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	3
Hazard No:	80
Tunnel restriction code:	E

Inland waterways transport (ADN)

<u>14.1. UN number or ID number:</u>	UN 3265
<u>14.2. UN proper shipping name:</u>	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1))
<u>14.3. Transport hazard class(es):</u>	8
<u>14.4. Packing group:</u>	III
Hazard label:	8
Classification code:	C3
Special Provisions:	274
Limited quantity:	5 L
Excepted quantity:	E1

Marine transport (IMDG)

<u>14.1. UN number or ID number:</u>	UN 3265
<u>14.2. UN proper shipping name:</u>	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1))
<u>14.3. Transport hazard class(es):</u>	8
<u>14.4. Packing group:</u>	III
Hazard label:	8
Special Provisions:	223, 274
Limited quantity:	5 L
Excepted quantity:	E1
EmS:	F-A, S-B
Segregation group:	1 - acids

Air transport (ICAO-TI/IATA-DGR)

<u>14.1. UN number or ID number:</u>	UN 3265
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<u>14.2. UN proper shipping name:</u>	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1))	
<u>14.3. Transport hazard class(es):</u>	8	
<u>14.4. Packing group:</u>	III	
Hazard label:	8	
Special Provisions:	A3 A803	
Limited quantity Passenger:	1 L	
Passenger LQ:	Y841	
Excepted quantity:	E1	
IATA-packing instructions - Passenger:	852	
IATA-max. quantity - Passenger:	5 L	
IATA-packing instructions - Cargo:	856	
IATA-max. quantity - Cargo:	60 L	

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes

14.6. Special precautions for user

No information available.

14.7. Maritime transport in bulk according to IMO instruments

No information available.

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

Information according to Directive 2012/18/EU (SEVESO III): E1 Hazardous to the Aquatic Environment

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water hazard class (D): 2 - obviously hazardous to water

Biocide registry number: N-70297

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out: reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 8,9,10.

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Abbreviations and acronyms

Met. Corr. 1: Corrosive to metals, hazard category 1
Acute Tox. 2: Acute toxicity, hazard category 2
Skin Corr. 1C: Skin corrosion, sub-category 1C
Eye Dam. 1: Serious eye damage, hazard category 1
Skin Sens. 1: Skin sensitisation, hazard category 1
Aquatic Acute 1: Hazardous to the aquatic environment, hazard category: Acute 1
Aquatic Chronic 1: Hazardous to the aquatic environment, long-term hazard category: Chronic 1
CLP: Classification, labelling and Packaging
REACH: Registration, Evaluation and Authorization of Chemicals
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
UN: United Nations
CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
LL50: Lethal loading, 50%
EL50: Effect loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate
NOEC: No Observed Effect Concentration
BCF: Bio-concentration factor
PBT: persistent, bioaccumulative, toxic
vPvB: very persistent, very bioaccumulative
ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Regulations concerning the international carriage of dangerous goods by rail
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
IMDG: International Maritime Code for Dangerous Goods
EmS: Emergency Schedules
MFAG: Medical First Aid Guide
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
SVHC: Substance of Very High Concern

Relevant H and EUH statements (number and full text)

H290	May be corrosive to metals.
H301	Toxic if swallowed.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

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The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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