EC Safety Data Sheet

according to regulation (EC) no. 1907/2006

WIN L 4649

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

1.1 Product identifier

WIN L 4649

Further trade names

CERTDOS 4649

UFI: Q5VD-60MY-N00C-3Q25

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

Use of the substance/the mixture

Preserving agent for boiler standstills.

1.3. Details of the supplier who provides the safety data sheet

Company name:	CERTUSS GmbH
Street:	Hafenstr. 65
City:	D-47809 Krefeld
Phone:	+49 (0) 2151 578-0
Contact partner:	Mr. Hamacher
E-mail:	t.hamacher@certuss.com
Informing department:	Technical Director

Monday to Thursday from 9 – 16 (9 a.m. to 4 p.m.), Friday 9 – 14 (9 a.m. to 2 p.m.)

Emergency number	DE: GIZ-Nord +49 (0)551 -19240
	AUT: +43 1 406 43 43

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Skin Irrit. 2; H315

Eye Dam. 1; H318

Skin Sens. 1; H317

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

2-aminoethanol; ethanolamine

Signal word: Danger

Pictograms:

Hazard statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.

Precautionary statements

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
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.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Preserving agent for boiler standstills.

Relevant ingredients

CAS-No.	Designation			Portion
	EC No.	Index No.	REACH No.	
	Classification (GB CLP Regulation)			
141-43-5	2-aminoethanol; ethanolamine			1 – < 5 %
	205-483-3	603-030-00-8		
	Acute tox. 4, acute tox. 4, acute tox. 4, Skin corr. 1B; H332 H312 H302 H314 H317			

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

Specific. Conc. Limits, M-factors and ATE

CAS-No.	EC No.	Designation	Portion
	Specific. Conc. Limits, M-factors and ATE		
141-43-5	205-483-3	2-aminoethanol; ethanolamine	1 – 5 %
	inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = 1025 mg/kg; oral: LD50 = 1515 mg/kg STOT SE 3; H335: >= 5 - 100		

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

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 1 glass of of water.

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

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

5.2. Special hazards arising from the substance or mixture

Non-flammable.

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

General advice

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

For cleaning up

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

Other information

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

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

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

No special fire protection measures are necessary.

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. Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.

Hints on joint storage

No special measures are necessary.

7.3. Specific end use(s)

Preserving agent for boiler standstills.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No.	Substance	ppm	mg/m³	fibres/ml	Category	Origin
141-43-5	2-Aminoethanol	1 3	2.5 7.6		TWA (8 h) STEL (15 min)	WEL 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.

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection: goggles.

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.

Skin protection

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	amber
Odour:	slightly pungent
Melting point/freezing point:	0 °C
Boiling point or initial boiling point and boiling range:	100 °C
Flammability:	not determined
Lower explosion limits:	5,5 vol. %
Upper explosion limits:	17 vol. %
Flash point:	not determined
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined
pH-Value (at 20 °C):	8,8
Viscosity / kinematic:	not determined
Water solubility:	completely miscible
Solubility in other solvents	not determined
Partition coefficient n-octanol/water:	not determined
Vapour pressure: (at 20 °C)	23,3 hPa
Density (at 20 °C):	1,05 g/cm³
Relative vapour density:	not determined
Particle characteristics:	not applicable

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

The product is not: Explosive.

Oxidizing properties

The product is not: oxidising.

Other safety characteristics

Evaporation rate:	not determined
Solid content:	not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Do not heat in the presence of aluminium!

10.5. Incompatible materials

Do not mix with other chemicals! Use only in aqueous solution!

10.6. Hazardous decomposition products

Carbon dioxide, carbon monoxide, nitrogen oxides

SECTION 11: Toxicological information

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

ATEmix calculated

ATE (oral) 40946 mg/kg; ATE (dermal) 27703 mg/kg; ATE (inhalation vapour) 297,3 mg/l; ATE (inhalation dust/mist) 40,54 mg/l

Acute toxicity

CAS No.	Chemical name					
	Exposure route	Dose		Species	Source	Method
141-43-5	2-aminoethanol, ethanolamine					
	oral	LD50	1515 mg/kg	Rat		
	dermal	LD50	1025 mg/kg	Rabbit	IUCLID	
	inhalative vapour	ATE	11 mg/l			
	inhalative dust/mist	ATE	1.5 mg/l			

11.2. Information on other hazards

Other information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

CAS No.	Chemical name						
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method
141-43-5	2-aminoethanol, ethanolamine						
	Acute fish toxicity	LC50	150 mg/l	96 h	Onchorhynchus mykiss	IUCLID	
	Acute algal toxicity	ErC50	22 mg/l	72 h	Desmodesmus subspicatus		
	Acute crustacean toxicity	EC50	65 mg/l	48 h	Daphnia magna		

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No.	Chemical name	Log Pow
141-43-5	2-aminoethanol, ethanolamine	- 1.91 (25 °C)

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

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

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.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

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

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

14.2. UN proper shipping name:	No dangerous good in sense of these transport regulations.
14.2. UN proper shipping name:	No dangerous good in sense of these transport regulations.
14.3. Transport hazard class(es):	No dangerous good in sense of these transport regulations.
14.4. Packing group:	No dangerous good in sense of these transport regulations.

Inland waterways transport (ADN)

14.1. UN number or ID number:	No dangerous good in sense of these transport regulations.
14.2. UN proper shipping name:	No dangerous good in sense of these transport regulations.
14.3. Transport hazard class(es):	No dangerous good in sense of these transport regulations.
14.4. Packing group:	No dangerous good in sense of these transport regulations.

Marine transport (IMDG)

14.1. UN number or ID number:	No dangerous good in sense of these transport regulations.
14.2. UN proper shipping name:	No dangerous good in sense of these transport regulations.
14.3. Transport hazard class(es):	No dangerous good in sense of these transport regulations.
14.4. Packing group:	No dangerous good in sense of these transport regulations.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:	No dangerous good in sense of these transport regulations.
14.2. UN proper shipping name:	No dangerous good in sense of these transport regulations.
14.3. Transport hazard class(es):	No dangerous good in sense of these transport regulations.
14.4. Packing group:	No dangerous good in sense of these transport regulations.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No information available.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

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

Directive 2010/75/EU on industrial emissions:	3,7 % (38,85 g/l)
Directive 2004/42/EC on VOC in paints and varnishes:	3,7 % (38,85 g/l)
Information according to Directive 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Employment restrictions:	Observe restrictions to employment for juveniles according to the ‚juvenile work protection guideline' (94/33/EC).
Water hazard class (D):	1 - slightly hazardous to water
Skin resorption/Sensitization:	Causes allergic hypersensitivity reactions.

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

Acute Tox:	Acute toxicity
Skin Corr:	Skin corrosion
Skin Irrit:	Skin irritation
Eye Dam:	Eye damage
Skin Sens:	Skin sensitisation
ADR:	Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG:	International Maritime Code for Dangerous Goods
IATA:	International Air Transport Association
GHS:	Globally Harmonized System of Classification and Labelling of Chemicals
EINECS:	European Inventory of Existing Commercial Chemical Substances
ELINCS:	European List of Notified Chemical Substances
CAS:	Chemical Abstracts Service
LC50:	Lethal concentration, 50%
LD50:	Lethal dose, 50%
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
EC/EEC:	European Community/European Economic Community
EU:	European Union
DNEL:	Derived No Effect Level
DMEL:	Derived Minimal Effect Level
PNEC:	Predicted No Effect Concentration
ATE:	Acute toxicity estimate
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
M-factor:	Multiplying factor
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)
EmS:	Emergency Schedules
MFAG:	Medical First Aid Guide
IATA:	International Air Transport Association
DGR:	Dangerous Goods Regulations
ICAO:	International Civil Aviation Organization
TI:	Technical Instructions
MARPOL:	International Convention for the Prevention of Marine Pollution from Ships
IBC:	Intermediate Bulk Container
VOC:	volatile organic compound
SVHC:	Substance of Very High Concern

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Skin Irrit. 2; H315	Calculation method
Eye Dam. 1; H318	Calculation method
Skin Sens. 1; H317	Calculation method

Relevant H and EUH statements (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.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.

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. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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

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