

## SAFETY DATA SHEET

WTP S89

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Compilation date: 30/07/2018

Revision No: 4

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

#### 1.1. Product identifier

**Product name:** WTP S89  
**CAS number:** 108-91-8  
**EINECS number:** 203-629-0  
**Index number:** 612-050-00-6  
**Synonyms:** AMINOCYCLOHEXANE  
HEXAHYDROANILINE

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

**Use of substance / mixture:** Boiler water treatment.

#### 1.3. Details of the supplier of the safety data sheet

**Company name:** Water Treatment Products Limited  
Unit 1 Gilchrist Thomas Industrial Estate  
Blaenavon  
Pontypool  
Torfaen  
NP4 9RL  
United Kingdom  
**Tel:** 01495 792790  
**Fax:** 01495 792090  
**Email:** [sales@watertreatmentproducts.co.uk](mailto:sales@watertreatmentproducts.co.uk)

#### 1.4. Emergency telephone number

**Emergency tel:** +44 (0) 1495 792790

### Section 2: Hazards identification

#### 2.1. Classification of the substance or mixture

**Classification under CLP:** Acute Tox. 4: H302; Repr. 2: H361f; Skin Corr. 1B: H314

**Most important adverse effects:** Harmful if swallowed. Causes severe skin burns and eye damage. Suspected of damaging fertility.

#### 2.2. Label elements

**Label elements:**

**Hazard statements:** H302: Harmful if swallowed.  
H314: Causes severe skin burns and eye damage.  
H361f: Suspected of damaging fertility.  
**Hazard pictograms:** GHS05: Corrosion  
GHS08: Health hazard

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**Signal words:** Danger

**Precautionary statements:** P260: Do not breathe dust/fumes/gas/mist/vapours/spray.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312: IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water .

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

## 2.3. Other hazards

**Other hazards:** Danger of serious damage to health by prolonged exposure.

**PBT:** This product is not identified as a PBT/vPvB substance.

## Section 3: Composition/information on ingredients

### 3.2. Mixtures

#### Hazardous ingredients:

CYCLOHEXYLAMINE - REACH registered number(s): 01-2119486803-29-0001

EINECS	CAS	PBT / WEL	CLP Classification	Percent
203-629-0	108-91-8	-	Flam. Liq. 3: H226; Repr. 2: H361f; Acute Tox. 4: H312; Acute Tox. 4: H302; Skin Corr. 1B: H314	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. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning. Consult a doctor.

**Eye contact:** Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination. Consult a doctor.

**Ingestion:** Wash out mouth with water. Do not induce vomiting. Give 1 cup of water to drink every 10 minutes. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.

**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious and breathing is OK, place in the recovery position. If conscious, ensure

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the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible.

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

**Skin contact:** Blistering may occur. Progressive ulceration will occur if treatment is not immediate.

**Eye contact:** Corneal burns may occur. May cause permanent damage.

**Ingestion:** Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose.

**Inhalation:** There may be shortness of breath with a burning sensation in the throat. 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.

## 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:** Corrosive. 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:** Notify the police and fire brigade immediately. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Turn leaking containers leak-side up to prevent the escape of liquid. Evacuate the area immediately.

### 6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers. Contain the spillage using bunding. Alert the neighbourhood to the presence of fumes or gas.

### 6.3. Methods and material for containment and cleaning up

**Clean-up procedures:** Clean-up should be dealt with only by qualified personnel familiar with the specific substance. Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

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## 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 a cool, well ventilated area. Keep container tightly closed.

### 7.3. Specific end use(s)

**Specific end use(s):** No data available.

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Workplace exposure limits:

State	8 hour TWA		15 min. STEL	
	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	41 mg/m <sup>3</sup>	-	-	-

#### Respirable dust:

#### Hazardous ingredients:

#### CYCLOHEXYLAMINE

#### Workplace exposure limits:

State	8 hour TWA		15 min. STEL	
	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	41 mg/m <sup>3</sup>	-	-	-

#### Respirable dust:

### DNEL/PNEC Values

**DNEL / PNEC** No data available.

### 8.2. Exposure controls

**Engineering measures:** Ensure there is sufficient ventilation of the area.

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

**Hand protection:** Chemical resistant protective gloves (EN 374) Neoprene gloves. Glove thickness:  
0.5mm Breakthrough time of the glove material > 8 hours.

**Eye protection:** Ensure eye bath is to hand. When handling this product, the use of safety glasses with side shields is recommended. The applicable European Standard can be found in EN 166.

**Skin protection:** Impermeable protective clothing.

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## Section 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

**State:** Liquid

**Colour:** Colourless

**Odour:** Pungent

**Oxidising:** Non-oxidising (by EC criteria)

**Solubility in water:** Soluble

**Viscosity:** Non-viscous

**Boiling point/range°C:** >35

**Flash point°C:** 60 - 93

**Relative density:** 0.95-0.98

**pH:** 9-12

### 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.

### 10.4. Conditions to avoid

**Conditions to avoid:** Heat. Hot surfaces. Flames.

### 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
ORL	MUS	LD50	770	mg/kg

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ORL	RAT	LD50	11	mg/kg
SCU	MUS	LD50	1150	mg/kg

## Hazardous ingredients:

### CYCLOHEXYLAMINE

DERMAL	RBT	LD50	275	mg/kg
INHALATION	RAT	4H LC50	>700	mg/kg
ORAL	RAT	LD50	432	mg/kg

## Relevant hazards for product:

Hazard	Route	Basis
Acute toxicity (ac. tox. 4)	ING	Hazardous: calculated
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated
Reproductive toxicity	--	Hazardous: calculated

## Symptoms / routes of exposure

**Skin contact:** Blistering may occur. Progressive ulceration will occur if treatment is not immediate.

**Eye contact:** Corneal burns may occur. May cause permanent damage.

**Ingestion:** Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose.

**Inhalation:** There may be shortness of breath with a burning sensation in the throat. 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
RAINBOW TROUT ( <i>Oncorhynchus mykiss</i> )	96H LC50	90	mg/l
Daphnia magna	48H EC50	80	mg/l
ALGAE	48H EC50	20	mg/l

## Hazardous ingredients:

### CYCLOHEXYLAMINE

ALGAE	72H EC50	29.3	mg/l
Daphnia magna	48H EC50	36.3	mg/l

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FISH	14 DAYS EC50	19	mg/l
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## 12.2. Persistence and degradability

**Persistence and degradability:** Biodegradable.

## 12.3. Bioaccumulative potential

**Bioaccumulative potential:** No 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:** Negligible ecotoxicity.

## Section 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal operations:** Transfer to a suitable container and arrange for collection by specialised disposal company.

**Disposal of packaging:** 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:** UN2735

### 14.2. UN proper shipping name

**Shipping name:** AMINES, LIQUID, CORROSIVE, N.O.S.  
(CYCLOHEXYLAMINE)

### 14.3. Transport hazard class(es)

**Transport class:** 8

### 14.4. Packing group

**Packing group:** III

### 14.5. Environmental hazards

**Environmentally hazardous:** No

**Marine pollutant:** No

### 14.6. Special precautions for user

**Special precautions:** No special precautions.

**Tunnel code:** E

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## Section 15: Regulatory information

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

**Specific regulations:** Not applicable.

### 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 2015/830.

\* indicates text in the SDS which has changed since the last revision.

**Phrases used in s.2 and s.3:** H226: Flammable liquid and vapour.

H302: Harmful if swallowed.

H312: Harmful in contact with skin.

H314: Causes severe skin burns and eye damage.

H361f: Suspected of damaging fertility.

**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.