

Safety data sheet
According to 1907/2006/EC, Article 31 REACH

Printing date 05.05.2016

Version: 5

Revision: 08.02.2016

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

· **1.1 Product identifier**

· **Trade name:** **STEAM CONTROL 10 (Listed NSF G6: n° 153110)**

· **Article number:** 94940002

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

· **Sector of Use**

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

· **Product category** PC37 Water treatment chemicals

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

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· **1.4 Emergency telephone number:**

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NL: Tel: + 31 164 250 100 Fax: + 31 164 266 710

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UK: Tel: +44 151 422 1000 Fax: +44 151 422 1011

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

Repr. 2 H361f Suspected of damaging fertility.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

(Contd. on page 2)

GB

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Trade name: STEAM CONTROL 10 (Listed NSF G6: n° 153110)

(Contd. of page 1)

· Hazard pictograms



GHS05 GHS08

· Signal word Danger

· Hazard-determining components of labelling:

cyclohexylamine
2-diethylaminoethanol
morpholine

· Hazard statements

H314 Causes severe skin burns and eye damage.
H361f Suspected of damaging fertility.

· Precautionary statements

P260 Do not breathe vapours.
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/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.

P310 Immediately call a POISON CENTER/doctor.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· 2.3 Other hazards The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds.

· Results of PBT and vPvB assessment

· PBT: Not applicable.
· vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

· Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

CAS: 108-91-8 EINECS: 203-629-0	cyclohexylamine	 	2.5-5%
CAS: 100-37-8 EINECS: 202-845-2 Reg.nr.: 01-2119488937-14-xxxx	2-diethylaminoethanol	 	2.5-5%
CAS: 110-91-8 EINECS: 203-815-1 Reg.nr.: 01-2119496057-30	morpholine	 	1-2.5%

· Ingredients according to Detergents Regulation 648/2004/EC For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· General information: Immediately remove any clothing soiled by the product.

· After inhalation: In case of unconsciousness place patient stably in side position for transportation.

· After skin contact:

If skin irritation continues, consult a doctor.
Immediately wash with water and soap and rinse thoroughly.
Immediately rinse with water.

· After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

· After swallowing: Drink plenty of water and provide fresh air. Call for a doctor immediately.

· 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

· 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

GB

(Contd. on page 3)

Safety data sheet

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(Contd. of page 2)

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture** During heating or in case of fire poisonous gases are produced.
- **5.3 Advice for firefighters**
- **Protective equipment:** Mount respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** No special measures required.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, universal binders).
Use neutralising agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** Keep respiratory protective device available.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**

· Ingredients with limit values that require monitoring at the workplace:

108-91-8 cyclohexylamine (2.5-5%)

WEL (Great Britain)	Long-term value: 41 mg/m ³ , 10 ppm
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110-91-8 morpholine (1-2.5%)

WEL (Great Britain)	Short-term value: 72 mg/m ³ , 20 ppm Long-term value: 36 mg/m ³ , 10 ppm Sk
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IOELV (European Union)	Short-term value: 72 mg/m ³ , 20 ppm Long-term value: 36 mg/m ³ , 10 ppm
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- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Do not inhale gases / fumes / aerosols.

(Contd. on page 4)

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(Contd. of page 3)

- Avoid contact with the eyes.
 Avoid contact with the eyes and skin.
 · **Respiratory protection:** Not required.
 · **Protection of hands:**



Protective gloves

Rubber gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Rubber gloves

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

· **Not suitable are gloves made of the following materials:** Strong material gloves· **Eye protection:**

Tightly sealed goggles

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**· **General Information**· **Appearance:**

· Form:	Liquid
· Colour:	Colourless
· Odour:	Characteristic
· Odour threshold:	Not determined.

· **pH-value (10 g/l) at 20 °C:** 10.5· **Change in condition**

· Melting point/Melting range:	Undetermined.
· Boiling point/Boiling range:	100 °C

· **Flash point:** Not applicable.· **Flammability (solid, gaseous):** Not applicable.· **Ignition temperature:**· **Decomposition temperature:** Not determined.· **Self-igniting:** Product is not selfigniting.· **Danger of explosion:** Product does not present an explosion hazard.· **Explosion limits:**

· Lower:	Not determined.
· Upper:	Not determined.

· **Vapour pressure at 20 °C:** 23 hPa

· Density at 20 °C:	0,997 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.

· **Solubility in / Miscibility with water:** Fully miscible.· **Partition coefficient (n-octanol/water):** Not determined.

(Contd. on page 5)

Safety data sheet

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Version: 5

Revision: 08.02.2016

Trade name: STEAM CONTROL 10 (Listed NSF G6: n° 153110)

(Contd. of page 4)

- **Viscosity:**
 - Dynamic:** Not determined.
 - Kinematic:** Not determined.
- **Solvent content:**
 - Organic solvents:** 2.5 %
- **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:

108-91-8 cyclohexylamine

Oral	LD50	156 mg/kg (Rat)
Dermal	LD50	277 mg/kg (Rabbit)

100-37-8 2-diethylaminoethanol

Oral	LD50	1300 mg/kg (Rat)
Dermal	LD50	1100 mg/kg (Rabbit)
Inhalative	LC50 / 4 h	4.6 mg/ltr (Mouse)
	EC 50 / 48 h	83.6 mg/ltr (Daphnia magna (water flea))
	EC 50 / 96 h	147 mg/ltr (fish)

- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes severe skin burns and eye damage.
- **Serious eye damage/irritation**
Causes serious eye damage.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity 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**
Suspected of damaging fertility.
- **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.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **Other information:** The product is biodegradable.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

(Contd. on page 6)

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(Contd. of page 5)

Must not reach sewage water or drainage ditch undiluted or unneutralised.



In accordance with the requirements of the RVO in the Act on Detergents and Cleansing Agents, tensides are biodegradable up to at least 90 %.

- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Disposal must be made according to official regulations
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· 14.1 UN-Number	UN2735
· ADR, IMDG, IATA	
· 14.2 UN proper shipping name	2735 AMINES, LIQUID, CORROSIVE, N.O.S. (MORPHOLINE, CYCLOHEXYLAMINE)
· ADR	2735 AMINES, LIQUID, CORROSIVE, N.O.S. (MORPHOLINE, CYCLOHEXYLAMINE)
· IMDG	AMINES, LIQUID, CORROSIVE, N.O.S. (MORPHOLINE, CYCLOHEXYLAMINE)
· IATA	Amines, liquid, corrosive, n.o.s. (Morpholine, Cyclohexylamine)
· 14.3 Transport hazard class(es)	
· ADR	
	
· Class	8 (C7) Corrosive substances.
· Label	8
· IMDG, IATA	
	
· Class	8 Corrosive substances.
· Label	8
· 14.4 Packing group	II
· ADR, IMDG, IATA	
· 14.5 Environmental hazards:	
· Marine pollutant:	No
· 14.6 Special precautions for user	Warning: Corrosive substances.
· Danger code (Kemler):	80
· EMS Number:	F-A,S-B
· Stowage Category	A
· Segregation Code	SG35 Stow "separated from" acids.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	1L

(Contd. on page 7)

GB

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(Contd. of page 6)

· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· Transport category	2
· Tunnel restriction code	E
<hr/>	
· IMDG	IL
· Limited quantities (LQ)	Code: E2
· Excepted quantities (EQ)	Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (MORPHOLINE, CYCLOHEXYLAMINE), 8, II

SECTION 15: Regulatory information

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

Reg. (EC) n. 1272/2008 - CLP;
Reg. (EC) n. 1907/2006 - Reach;
Reg. (EC) n. 2015/830 annex II of REACH;
Reg. (EC) n. 648/04 (Detergents);
Reg. (EC) n. 528/12 (Biocides BPR);
Reg. (EC) n. 1223/2009 (Cosmetics);
Dir. 06/08 ADR - RID - IMDG - IATA;
Dir. 47/08 (Aerosols); Dir. 12/18 (Seveso III);
Dir. 2008/98/CE and Reg. (EC) n.1357/2014 (Waste management)

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **National regulations:**

· **Technical instructions (air):**

Class	Share in %
NK	1-2,5

· **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H331 Toxic if inhaled.
H361f Suspected of damaging fertility.

· **Department issuing SDS:**

Customer Service
NL: Tel: + 31 164 250 100 Fax: + 31 164 266 710
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(Contd. on page 8)

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Trade name: STEAM CONTROL 10 (Listed NSF G6: n° 153110)

(Contd. of page 7)

· Abbreviations and acronyms:

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 Harmonised 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 (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4

Acute Tox. 3: Acute toxicity, Hazard Category 3

Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Repr. 2: Reproductive toxicity, Hazard Category 2

· * Data compared to the previous version altered.

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