



## SAFETY DATA SHEET

# STEAMATE NA0490

## 1 IDENTIFICATION OF PREPARATION AND OF COMPANY

### 1.1 Identification of the substance or preparation

Product : STEAMATE NA0490

### 1.2 Use of substance/preparation

Condensate corrosion inhibitor

### 1.3 Company/undertaking identification

GE Water & Process Technologies France SNC

Allée du 1er Mai

Parc d'Activités de Paris-Est

F-77183 Croissy Beaubourg

Tel.: 01 60 37 59 60

### 1.4 Emergency telephone

- GE Betz (24h/24h) : 01 60 37 00 00

- Official advisory body

ORFILA : 01 45 42 59 59

## 2 COMPOSITION / INFORMATION ON INGREDIENTS

### Chemical description

Neutralising amine

Hazardous component(s)	EINECS/ELINCS #	CAS #	Conc.
Cyclohexylamine C, R10-21/22-34	203-629-0	108-91-8	> 25 %
Morpholine C, R10-20/21/22-34	203-815-1	110-91-8	10 - 25 %

### Remarks

The classification of the above substance(s) is given, including the symbol letters and R phrases which are assigned in accordance with their physicochemical, health and environmental hazards. Please refer to section 16 (Relevant R phrases, used in sections 2 and 3 of this SDS), where the full text of each relevant R phrase is listed.

## 3 HAZARDS IDENTIFICATION

### Important hazards

- Health/physical hazard Causes burns.  
Harmful in contact with skin and if swallowed.
- Symptoms of exposure Inhalation may cause lightheadedness, slurred speech, nausea and vomiting (pulmonary oedema may result).
- Environmental hazards The product is not classified as dangerous for the environment.



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## 4 FIRST AID MEASURES

<b>Skin contact</b>	Immediately remove all contaminated clothing. Wash immediately with plenty of water. Seek medical attention.
<b>Eye contact</b>	Flush immediately with plenty of running water. Continue rinsing for at least 10 minutes. Keep eyelids apart. Seek medical attention.
<b>Inhalation</b>	Remove patient to fresh air, allow to rest and keep warm. Seek medical attention.
<b>Ingestion</b>	First rinse mouth with water. Immediately give 1-2 glasses of water, if victim is fully conscious. Do NOT induce vomiting! Seek medical attention.

## 5 FIRE-FIGHTING MEASURES

### Extinguishing Media

- Suitable Carbon dioxide, dry chemicals, foam.  
Avoid water if possible.

**Special protective equipment for fire fighters** Self contained breathing apparatus. (CEN : EN 137)  
Protective clothing (CEN : EN 469)  
Protective gloves (CEN : EN 659)  
Helmet (CEN : EN 443)

**Special exposure hazards** Oxides of carbon and nitrogen evolved in fire.

**Flash point (PMCC)** 62 °C

## 6 ACCIDENTAL RELEASE MEASURES

**Personal precautions** Wear protective clothing, gloves and safety goggles.  
Please refer also to section no. 8 'Exposure controls' for further information.

**Environmental precautions** Prevent from entering sewers or the immediate environment.  
Accidental release of large quantities into the aquatic environment may harm aquatic organisms.

### Methods for Cleaning Up

- on soil Remove sources of ignition.  
Absorb onto inert material and dispose of according to Special Waste Regulations.

## 7 HANDLING AND STORAGE

**7.1 Handling** Combustible.  
Do not use around sparks or flames.  
Earth containers during filling or discharge when performed at temperatures at or above the product flash point.

**7.2 Storage** Protect from freezing.  
Do not store at elevated temperatures.



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Maximum storage stability (days) 720

## 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure limit values

- VME/VLE (INRS) Cyclohexylamine : 10 ppm 40 mg/m<sup>3</sup> (VME) - néant (VLE), risk of percutaneous penetration  
Morpholine : 20 ppm 70 mg/m<sup>3</sup> (VME) - 30 ppm 105 mg/m<sup>3</sup> (VLE)

### Exposure controls

- Recommended engineering controls Adequate ventilation to maintain air contaminants below exposure limits.
- Respiratory protection In case of insufficient ventilation, use a breathing mask with filter type: A2-P2  
CEN : EN 140; EN 141
- Hand protection Gauntlet type neoprene gloves (Protection against unintentional short-term contact)  
CEN : EN 374-1/2/3; EN 420
- Eye protection Splash proof chemical goggles.  
Face shield.  
CEN : EN 166
- Skin protection Chemical resistant apron.  
CEN : EN 340; EN 368; EN 369; EN 467
- Environmental exposure controls Prevent from entering in public sewers or the immediate environment.

## 9 PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 General information

Appearance Liquid  
Colour Colourless to yellow  
Odour Amine

### 9.2 Important health, safety and environmental info

pH (concentrated product) 12,5  
Flash point (Pensky/Martens) (°C) 62  
Density at 20°C (kg/m<sup>3</sup>) 980  
Solubility in water (% weight) Completely soluble  
Viscosity at 20°C (mPas) 3  
Vapour density (air=1) <1  
Evaporation rate (ether=1) <1

### 9.3 Other information

Melting point, (°C) -3

## 10 STABILITY AND REACTIVITY

- 10.1 Conditions to avoid** Avoid sources of ignition.
- 10.2 Materials to avoid** Avoid contact with strong acids and oxidisers.
- 10.3 Hazardous decomposition products** Oxides of carbon and nitrogen evolved in fire.



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## 11 TOXICOLOGICAL INFORMATION

### Mammalian Test Data

- Oral LD50, rat (mg/kg) 530 (estimated value)
- Dermal LD50, rabbit (mg/kg) 825 (estimated value)
- Eye irritation, rabbit Corrosive

### Exposure hazard

- Inhalation Dusts, vapours, mists or aerosols cause irritation to upper respiratory tract. Prolonged exposure may cause dizziness and headache.
- Skin contact Causes burns.
- Eye contact Causes burns.
- Ingestion Causes burns in mouth, throat and/or stomach. Causes nausea, dizziness and/or vomiting.
- Chronic effects Prolonged or repeated exposure may cause tissue necrosis.

## 12 ECOLOGICAL INFORMATION

### Ecotoxicity

- Fathead minnow (mg/l) LC50 : 190 (Calculated data)  
NOEL : 110 (Calculated data)  
96 hour Acute Toxicity
- Daphnia Magna (mg/l) LC50 : 55 (Calculated data)  
NOEL : 24 (Calculated data)  
48 hour Acute Toxicity

### Persistence and degradability

- COD (mgO<sub>2</sub>/g) 1017 (calculated data)
- BOD 5 (mgO<sub>2</sub>/g) 1 (calculated data)
- BOD 28 (mgO<sub>2</sub>/g) 113 (calculated data)
- Closed Bottle Test (% Degradation in 28 days) 16 (calculated data)
- Zahn-Wellens Test (% Degradation in 28 days) 86 (calculated data)
- TOC (mg C/g) 237 (calculated data)

### Other adverse effects

- Nutrients P = 0 mg/g ; N = 55.68 mg/g

### Summary

The product is not classified as dangerous for the environment.  
The evaluation of environmental hazards is based on the concentration limits as set out in directive 1999/45/EC.



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### 13 DISPOSAL CONSIDERATIONS

<b>Disposal of product</b>	According to Special Waste Regulations.  EWC ( European Waste Code ) recommendation : 16 03 05 16 Wastes not otherwise specified in the list. 16 03 Off-specification batches and unused products. 16 03 05 Organic wastes containing dangerous substances. Depending on the origin and state of the waste, other EWC numbers may be applicable too.
<b>Disposal of packaging</b>	According to Special Waste Regulations.  EWC ( European Waste Code ) recommendation : 15 01 10 15 Waste packaging; absorbents, wiping cloths, filter materials and protective clothing not otherwise specified. 15 01 Packaging (including separately collected municipal packaging waste). 15 01 10 Packaging containing residues of or contaminated by dangerous substances. Depending on the origin and state of the waste, other EWC numbers may be applicable too.

### 14 TRANSPORT INFORMATION

<b>Substance id.no. (SIN) (UN No.)</b>	2735
<b>Correct shipping name</b>	Amines, liquid, corrosive, n.o.s.
<b>- Contains</b>	Cyclohexylamine mixture Morpholine mixture
<b>Land transport</b>	
- Transport hazard label	8 Corrosive
- RID/ADR classification	8
- Packaging group	II
<b>Maritime transport</b>	
- Transport hazard label	8 Corrosive
- IMO-IMDG class	8
- Packaging group	II
- EmS no.	F-A, S-B
- MFAG no.	See Emergency action guide. The treatment recommended in this Guide is specified in the appropriate tables and more comprehensive in the appropriate sections of the Appendices.
<b>Air transport</b>	
- Transport hazard label	8 Corrosive
- ICAO/IATA classification	8
<b>Other information</b>	TREMCARD 80GC7-II



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## 15 REGULATORY INFORMATION

### EEC labelling information

- Symbol(s) Corrosive:C
- Contains Cyclohexylamine  
Morpholine
- R Phrase(s) R 21/22 :Harmful in contact with skin and if swallowed.  
R 34 :Causes burns.
- S Phrase(s) S 26 :In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S 28 :After contact with skin, wash immediately with plenty of soap and water.  
S 36/37/39 :Wear suitable protective clothing, gloves and eye/face protection.  
S 45 :In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- EINECS number All ingredients of this product are listed in EINECS or ELINCS, unless specifically exempted under the EEC Directive 67/548/EEC.
- France Tableau des maladies professionnelles n° 49

## 16 OTHER INFORMATION

**Nature of revision** Correction in Section: 8,9

**Based on EC Directive** 1999/45/EC  
2001/118/EC  
2001/58/EC

This information is based on our current knowledge and is intended to describe the product for the purpose of safety requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

**Relevant R phrases, used in sections 2 and 3 of this SDS** R 10 : Flammable.  
R 34 : Causes burns.  
R 20/21/22 : Harmful by inhalation, in contact with skin and if swallowed.  
R 21/22 : Harmful in contact with skin and if swallowed.