

**Safety Data Sheet**  
according to Regulation (EC) No. 1907/2006

Print date:

Revision date: 30.11.2010

Revision no.:

1,10

**CircoAction AFM**

11194-0003

**1. Identification of the substance/mixture and of the company/undertaking****Identification of the substance or mixture****CircoAction AFM****Use of the substance/mixture**

Disinfectant

**Company/undertaking identification****Supplier**

GEA Farm Technologies (UK) Ltd.

Wylle Works, Watery Lane, Bishopstrow,

GB Warminster, Wiltshire BA12 9HT

Telephone: + 44 (0)1985 216444

Responsible Department:

For technical or commercial enquiries:

Tel: + 44 (0)1985 216444 Fax: + 44 (0)1985 216692

e-mail: info.geafarmtechnologies@geagroup.com

24 Hour Emergency Telephone No.

For advice on chemical emergencies, spillages, fires or First Aid

+44 (0) 870 190 6777 (GEA Farm Technologies)

Responsible for the safety data sheet: sds@gbk-ingelheim.de

**2. Hazards identification****Classification**

Indications of danger : Corrosive, Dangerous for the environment

R-phrases:

Contact with acids liberates toxic gas.

Causes burns.

Very toxic to aquatic organisms.

**3. Composition/information on ingredients****Chemical characterization ( Mixture )**

Soda alkaline solution containing active chlorine

**Hazardous components**

EC No.	CAS No.	Chemical name	Quantity	Classification
231-668-3	7681-52-9	Sodium hypochlorite 12,5% Cl active	< 60 %	C, N R34-31-50
215-185-5	1310-73-2	Sodium hydroxide	< 5 %	C R35
207-838-8	497-19-8	Sodium carbonate	< 5 %	Xi R36

Full text of each relevant R phrase can be found in heading 16.

**4. First aid measures****General information**

Remove and wash contaminated clothing before re-use.

Consult a physician.

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**After inhalation**

Move to fresh air in case of accidental inhalation of fumes from overheating or combustion.  
If you feel unwell, seek medical advice.

**After contact with skin**

Wash off immediately with soap and plenty of water.  
Consult a physician.

**After contact with eyes**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
Summon a doctor immediately.  
Seek medical treatment by eye specialist.

**After ingestion**

Do not induce vomiting.  
Rinse out mouth and give plenty of water to drink.  
If possible drink milk afterwards.  
Summon a doctor immediately.

**Advice to doctor**

Attention. Beware, danger of aspiration.  
Hazard of gastric perforation.

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**5. Fire-fighting measures****Suitable extinguishing media**

Product does not burn, fire-extinguishing activities according to surrounding.

**Extinguishing media which must not be used for safety reasons**

Full water jet.

**Special exposure hazards arising from substance or mixture itself, combustion products, resulting gases**

Chlorine compounds.

**Special protective equipment for fire-fighters**

Wear self-contained breathing apparatus and protective suit.

**Additional information**

Cool containers at risk with water spray jet.  
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

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**6. Accidental release measures****Personal precautions**

Ensure adequate ventilation.  
Suppress gases/vapours/mists with water spray jet  
Use personal protective clothing.  
Avoid contact with skin, eyes and clothing.

**Environmental precautions**

Do not discharge into the drains/surface waters/groundwater.

**Methods for cleaning up/taking up**

Take up with absorbent material (e.g. kieselguhr).  
Shovel into suitable container for disposal.

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**7. Handling and storage****Handling**

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**Advice on safe handling**

Keep container tightly closed.

Keep a good ventilation and air-exhaust at the place of work.

Avoid contact with skin, eyes and clothing.

**Advice on protection against fire and explosion**

No special protective measures against fire required.

**Storage****Requirements for storage rooms and vessels**

Do not use aluminium or light metal containers for warehousing.

Keep containers tightly closed in a dry, well-ventilated place.

**Advice on storage compatibility**

Do not store with acids.

Contact with acids liberates toxic gas.

**Further information on storage conditions**

Keep away from food, drink and animal feeding stuffs.

**8. Exposure controls/personal protection****Exposure limit values****Exposure limits (EH40)**

CAS No.	Chemical name	ml/m <sup>3</sup>	mg/m <sup>3</sup>	F/ml	Category	Origin
7782-50-5	Chlorine	-	-		TWA (8 h)	WEL
		0.5	1.5		STEL (15 min)	WEL
1310-73-2	Sodium hydroxide	-	-		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL

**Occupational exposure controls**

Ensure adequate ventilation, especially in confined areas.

**Protective and hygiene measures**

Do not inhale gases.

Wash hands before breaks and immediately after handling the product.

When using, do not eat, drink or smoke.

Avoid contact with skin, eyes and clothing.

Remove and wash contaminated clothing before re-use.

**Respiratory protection**

No personal respiratory protective equipment normally required.

**Hand protection**

Protective gloves resistant to chemicals made off natural-rubber latex, minimum coat thickness 0.6 mm, permeation resistance (wear duration) approx. 480 minutes, i.e. protective glove <Lapren 706> made by www.kcl.de.

This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions.

Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

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**Eye protection**

Tightly fitting goggles.

Eye wash bottle with pure water.

**Skin protection**

Long sleeved clothing.

Light protective clothing

**9. Physical and chemical properties****General information**

Physical state:	Liquid
Colour:	Light yellow/Green
Odour:	Chlorine

**Important health, safety and environmental information**

	Test method
pH-Value (at 20 °C):	> 13

**Changes in the physical state**

Flash point: n.a.

Lower explosion limits: n.a.

Upper explosion limits:

Density (at 20 °C): 1,18 g/cm<sup>3</sup>Water solubility: Completely miscible  
(at 20 °C)**Other information**

Ignition temperature: n.a.

**10. Stability and reactivity****Conditions to avoid**

To avoid thermal decomposition, do not overheat.

Exothermic reaction with strong acids.

Contact with acids liberates toxic gas.

**Materials to avoid**

Acids.

**Hazardous decomposition products**

Chlorine

**Further information**

No decomposition if stored and applied as directed.

**11. Toxicological information****Empirical data on effects on humans**

Causes burns.

The product causes burns of eyes, skin and mucous membranes.

Ingestion of aqueous solution causes gastrointestinal burns.

Hazard of gastric perforation.

**12. Ecological information****Ecotoxicity**

Sodium hypochlorite

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LC50/Fish/96 h = 0,01 - 0,1 mg/l [Cl active]  
 EC50/Daphnia/48 h = 0,01 - 0,1 mg/l [Cl active]

**Further information**

Do not flush into surface water or sanitary sewer system.  
 Hazardous water pollutant.  
 A pH-change becomes possible in water.  
 Very toxic to aquatic organisms.

**13. Disposal considerations**

**Advice on disposal**

Disposal in accordance with local regulations.

**14. Transport information**

**Land transport (ADR/RID)**

UN number: 3266  
**Description of the goods**  
 CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Sodium hydroxide, Sodium hypochlorite)  
 ADR/RID class: 8  
 Classification code: C5  
 Warning plate  
 Hazard-no.: 80  
 Hazard label: 8



ADR/RID packing group: II  
 Limited quantity: LQ22  
 Tunnel restriction code: E

**Other applicable information (land transport)**

Transport category: 2  
 Additional label with symbol "fish and tree" according to subsection 5.2.1.8.3. ADR for single packagings and inner packagings with > 5 kg or 5 L, transition period ends 31.12.2010.

**Marine transport**

UN number: 3266  
**Description of the goods**  
 CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (sodium hydroxide, sodium hypochlorite)  
 IMDG code: 8  
 Hazard label: 8



IMDG packing group: II  
 EmS: F-A, S-B  
 Limited quantity: 1 L / 30 kg

**Other applicable information (marine transport)**

Additional label with symbol "fish and tree" according to subsection 5.2.1. IMDG Code for single packagings and inner packagings with > 5 kg or 5 L.

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**Air transport**

UN/ID number: 3266

**Description of the goods**

CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (sodium hydroxide, sodium hypochlorite)

ICAO/IATA-DGR: 8

Hazard label: 8



ICAO packing group: II  
 Limited quantity Passenger: Y808 / 0,5 L  
 IATA-packing instructions - Passenger: 808  
 IATA-max. quantity - Passenger: 1 L  
 IATA-packing instructions - Cargo: 812  
 IATA-max. quantity - Cargo: 30 L

**15. Regulatory information****Labelling****Additional advice on labelling**

According to EC-regulations the product is to be labelled as follows:

Danger symbols: C - Corrosive; N - Dangerous for the environment



C - Corrosive



N - Dangerous for the environment

**Hazardous components which must be listed on the label**

Sodium hydroxide

**R phrases**

- 31 Contact with acids liberates toxic gas.  
 34 Causes burns.  
 50 Very toxic to aquatic organisms.

**S phrases**

- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
 28 After contact with skin, wash immediately with plenty of water.  
 35 This material and its container must be disposed of in a safe way.  
 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
 61 Avoid release to the environment. Refer to special instructions / Safety data sheets.  
 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

**EU regulatory information**

1999/13/EC (VOC): 0 %

**National regulatory information**

Employment restrictions: Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing.  
 Water contaminating class (D): 2 - water contaminating

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**16. Other information****Full text of R-phrases referred to under sections 2 and 3**

- 31 Contact with acids liberates toxic gas.
- 34 Causes burns.
- 35 Causes severe burns.
- 36 Irritating to eyes.
- 50 Very toxic to aquatic organisms.

**Further Information**

The information in this Safety Data Sheet refer to the concentrate, not to the ready to use solution.

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)

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