

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

#### 1.1. Product identifier

Product form : Mixture  
Product name : CircoPure AFM

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

##### 1.2.1. Relevant identified uses

Industrial/Professional use spec : For professional use only  
Use of the substance/mixture : Detergent

##### 1.2.2. Uses advised against

No additional information available

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

##### Supplier

GEA Farm Technologies GmbH

Siemensstraße 25-27

59199 Bönen - Germany

T + 49 (0) 23839370

E-mail address of competent person responsible for the SDS: sds@gbk-ingelheim.de

##### Distributor

GEA Farm Technologies (UK) Ltd.

Wylve Works, Watery Lane, Bishopstrow,

Warminster, Wiltshire BA12 9Ht - United Kingdom

T + 44 (0)1985 216444

#### 1.4. Emergency telephone number

Emergency number : 24 Hour Emergency Telephone No. for advice on chemical emergencies, spillages, fires or First Aid: +44 (0) 870 1906777 (GEA Farm Technologies)  
NATIONAL: In England and Wales: 111, In Scotland: 111  
INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a)

### SECTION 2: Hazards identification

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

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Corrosive to metals, Category 1 H290

Skin corrosion/irritation, Category 1A H314

Full text of H statements : see section 16

##### Adverse physicochemical, human health and environmental effects

May be corrosive to metals. Causes severe skin burns and eye damage.

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) :

Danger

Hazardous ingredients :

Sodium hydroxide

Hazard statements (CLP) :

H290 - May be corrosive to metals.  
H314 - Causes severe skin burns and eye damage.

Precautionary statements (CLP) :

P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
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 or 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.  
P308+P313 - IF exposed or concerned: Get medical advice/attention.  
P406 - Store in a corrosion-resistant container with a resistant inner liner.

#### 2.3. Other hazards

PBT : Not applicable.

vPvB : Not applicable.

### SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Comments : Aqueous solution of sodium hydroxide

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Sodium hydroxide	(CAS-No.) 1310-73-2 (EC-No.) 215-185-5 (EC Index-No.) 011-002-00-6 (REACH-no) 01-2119457892-27	25 - 30	Met. Corr. 1, H290 Skin Corr. 1A, H314
Hexyl D-glucoside	(CAS-No.) 54549-24-5 (EC-No.) 259-217-6 (REACH-no) 01-2119492545-29	1 - 5	Eye Dam. 1, H318
2-Ethylhexanol ethoxylate	(CAS-No.) 26468-86-0 (EC-No.) 607-943-2	1 - 5	Eye Dam. 1, H318

#### Specific concentration limits:

Name	Product identifier	Specific concentration limits
Sodium hydroxide	(CAS-No.) 1310-73-2 (EC-No.) 215-185-5 (EC Index-No.) 011-002-00-6 (REACH-no) 01-2119457892-27	( 0.5 =<C < 2) Eye Irrit. 2, H319 ( 0.5 =<C < 2) Skin Irrit. 2, H315 ( 2 =<C < 5) Skin Corr. 1B, H314 ( C >= 5) Skin Corr. 1A, H314

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : Call a physician immediately. Remove and wash contaminated clothing before re-use.  
 First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.  
 First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.  
 First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.  
 First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Drink plenty of water. Call a physician immediately.

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

Symptoms/effects after skin contact : Burns.  
 Symptoms/effects after eye contact : Serious damage to eyes.  
 Symptoms/effects after ingestion : Burns.

### 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 : Fire-extinguishing activities according to surrounding. Product itself does not burn.  
 Unsuitable extinguishing media : high volume water jet.

### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon monoxide. Carbon dioxide. Phosphorus oxides. Chlorine compounds.

### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.  
 Other 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.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ensure adequate air ventilation. Wear personal protective equipment. Avoid contact with skin, eyes and clothing.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Avoid release to the environment.

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

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe. Do not breathe vapour/aerosol. Wear personal protective equipment.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in corrosive resistant container with a resistant inner liner. Keep only in original container. Store locked up. Store in a well-ventilated place. Keep cool.

Incompatible materials : Acids.

Information on mixed storage : Keep away from food, drink and animal feeding stuffs.

Packaging materials : Don't use packaging made out of aluminium, zinc or tin.

### 7.3. Specific end use(s)

Detergent.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Sodium hydroxide (1310-73-2)		
United Kingdom	Local name	Sodium hydroxide
United Kingdom	WEL STEL (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
United Kingdom	Regulatory reference	EH40. HSE

### 8.2. Exposure controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### Hand protection:

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

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Chemically resistant protective gloves	Natural rubber	6 (> 480 minutes)	0,6		EN 374

#### Eye protection:

Safety glasses. EN 166. Eyewash bottle with clean water. EN 15154

#### Skin and body protection:

Acid-resistant clothing

Type	Standard
Long sleeved protective clothing	EN 368

### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

### Personal protective equipment symbol(s):



### Environmental exposure controls:

Avoid release to the environment.

### Other information:

Do not eat, drink or smoke when using this product. Wash hands before breaks and at the end of workday. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use.

## SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Colour	: light yellow
Odour	: Soft
Odour threshold	: No data available
pH	: > 13 (20°C)
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not applicable
Flammability (solid, gas)	: Not applicable
	Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.3 - 1.36 g/cm <sup>3</sup> (20°C)
Solubility	: Water: completely miscible
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Not applicable.
Oxidising properties	: Product is not explosive.
Explosive limits	: No data available

### 9.2. Other information

VOC content	: 0 %
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Exothermic reaction on contact with : Strong acids.

### 10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat.

### 10.5. Incompatible materials

Acids.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Causes severe skin burns and eye damage. pH: > 13 (20°C)
Serious eye damage/irritation	: Serious eye damage, category 1, implicit pH: > 13 (20°C)
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general	: Before neutralisation, the product may represent a danger to aquatic organisms.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified

#### 12.2. Persistence and degradability

##### CircoPure AFM

Persistence and degradability	The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.
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#### 12.3. Bioaccumulative potential

##### Hexyl D-glucoside (54549-24-5)

Log Pow	1.72 - 1.77
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#### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

No additional information available

#### 12.6. Other adverse effects

Other adverse effects	: May cause pH changes in aqueous ecological systems.
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### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste treatment methods	: Disposal in accordance with local regulations. Should not be disposed of with household waste.
Sewage disposal recommendations	: Do not discharge into drains.
Product/Packaging disposal recommendations	: Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.
Additional information	: Recommended cleaning agent: Water with detergents.
Ecology - waste materials	: Avoid release to the environment.
European List of Waste (LoW) code	: 02 01 08* - agrochemical waste containing dangerous substances

### SECTION 14: Transport information

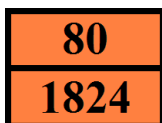
In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
1824	1824	1824	1824	1824
<b>14.2. UN proper shipping name</b>				
SODIUM HYDROXIDE SOLUTION	SODIUM HYDROXIDE SOLUTION	Sodium hydroxide solution	SODIUM HYDROXIDE SOLUTION	SODIUM HYDROXIDE SOLUTION
<b>Transport document description</b>				
UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II, (E)	UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II	UN 1824 Sodium hydroxide solution, 8, II	UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II	UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II
<b>14.3. Transport hazard class(es)</b>				
8	8	8	8	8
				
<b>14.4. Packing group</b>				
II	II	II	II	II
<b>14.5. Environmental hazards</b>				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

### 14.6. Special precautions for user

#### Overland transport

Classification code (ADR) : C5  
 Limited quantities (ADR) : 1I  
 Excepted quantities (ADR) : E2  
 Packing instructions (ADR) : P001, IBC02  
 Mixed packing provisions (ADR) : MP15  
 Transport category (ADR) : 2  
 Hazard identification number (Kemler No.) : 80  
 Orange plates :



Tunnel restriction code (ADR) : E  
 EAC code : 2R

#### Transport by sea

Packing instructions (IMDG) : P001  
 EmS-No. (Fire) : F-A  
 EmS-No. (Spillage) : S-B  
 Segregation (IMDG) : SG35  
 Properties and observations (IMDG) : Colourless liquid. Colourless liquid. Reacts with ammonium salts, evolving ammonia gas. Causes burns to skin, eyes and mucous membranes. Reacts violently with acids.

#### Air transport

PCA Excepted quantities (IATA) : E2  
 PCA Limited quantities (IATA) : Y840  
 PCA limited quantity max net quantity (IATA) : 0.5L  
 PCA packing instructions (IATA) : 851  
 PCA max net quantity (IATA) : 1L  
 CAO packing instructions (IATA) : 855  
 CAO max net quantity (IATA) : 30L

Special provisions (IATA) : A3  
ERG code (IATA) : 8L

### Inland waterway transport

Classification code (ADN) : C5  
Limited quantities (ADN) : 1 L  
Excepted quantities (ADN) : E2  
Carriage permitted (ADN) : T  
Equipment required (ADN) : PP, EP  
Number of blue cones/lights (ADN) : 0

### Rail transport

Classification code (RID) : C5  
Limited quantities (RID) : 1L  
Excepted quantities (RID) : E2  
Packing instructions (RID) : P001, IBC02  
Transport category (RID) : 2  
Hazard identification number (RID) : 80

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions  
Contains no substance on the REACH candidate list  
Contains no REACH Annex XIV substances

VOC content : 0 %  
Seveso Additional information : Not subject to the Seveso III Directive

#### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

### Indication of changes:

All chapters have been modified since the previous version.

### Abbreviations and acronyms:

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
DOT	Department of Transport
TDG	Transportation of Dangerous Goods
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
GHS	Globally Harmonized System of Classification, Labelling and Packaging of Chemicals
IARC	International Agency for Research on Cancer
vPvB	Very Persistent and Very Bioaccumulative
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
CAS	CAS (Chemical Abstracts Service) number

# CircoPure AFM

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830  
SDS No: 11194-0075

IBC-Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ATE	Acute Toxicity Estimate
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
BCF	Bioconcentration factor
MARPOL 73/78	MARPOL 73/78: International Convention for the Prevention of Pollution From Ships
ADG	Transport of Australian Dangerous Goods

Other information : The information in this Safety Data Sheet refer to the concentrate, not to the ready to use solution. Data of sections 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. The delivery specifications are contained in the corresponding product sheet. This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

Full text of H- and EUH-statements:	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Met. Corr. 1	H290	Expert judgment
Skin Corr. 1A	H314	On basis of test data

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