

Date of issue: 11.04.2017 Replaces Data Sheet of: 27.03.2017  
 "\*" alterations as compared to previous version; n.ap. = not applicable; n.av. = not available



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

- 1.1 **Product identifier**  
 \* **Trade Name:** PLUSPAC FD ACH, PLUSPAC FD ACH - HP  
**Article No.:** n.av.  
**Preparation No.:** n.av.  
**Registration No.:** n.ap.
- 1.2 **Relevant identified uses of the substance or mixture and uses advised against**  
 Identified uses: Wastewater treatment
- 1.3 **Details of the supplier of the safety data sheet**
- 1.3.1 **Address of the Company / Supplier:**  
 Feralco Deutschland GmbH, Große Drakenburger Straße 93-97, D - 31582 Nienburg / Weser  
 Telephone: +49-5021-988-470, Telefax: +49-5021-988 481, E-Mail: info.de@feralco.com
- 1.3.2 **Responsible for the data sheet:**  
 CoSiChem AG, Ernst-Lemmer-Straße 23, D - 35041 Marburg, info@cosichem.de
- 1.4 **Emergency telephone number**  
 Emergency - Telephone of Company / Undertaking Information Centre Specialising in Symptoms of Poisoning  
 Telephone: GGIZ +49 361 730730 (24h) Telephone: +44 870 600 6266

## SECTION 2: Hazards identification

- 2.1 **Classification of the substance or mixture**  
**Classification and labelling according to Directive 1272/2008/EC:**  
 n.ap.
- 2.2 **Label elements**  
 Classification according to 1272/2008/EC: No.  
 Applicable Exemptions:  
 Signal word(s): Hazard pictogram(s):  
 Component(s):
- H - Phrases:**
- \* **P - Phrases:**
- \* Additional Markings:  
 None.
- The above mentioned labelling is valid for distribution to industrial user.
- 2.3 **Other hazards**  
 This mixture contains no substances which are assessed to be PBT or vPvB.

## SECTION 3: Composition/information on ingredients

- 3.1 **Substances**  
 n.ap.
- 3.2 **Mixtures**  
**Chemical Characterisation:**  
 Aqueous Polyaluminiumchloride-hydroxide solution  
**Dangerous Ingredients:**
- | Material                            | CAS - No.  | Index - No. | EC - No.  | REACH - No.           | m% - range |
|-------------------------------------|------------|-------------|-----------|-----------------------|------------|
| Dialuminium chloride pentahydroxide | 12042-91-0 | n.av.       | 234-933-1 | 01-2119533142-53-xxxx | 50%        |

Text of H - phrases: see section 16  
 m% - range: x - y  $\triangleq$  x  $\geq$  - < y

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**SECTION 4: First aid measures**

- 4.1 **Description of first aid measures**
- 4.1.1 **Inhalation:**  
Move out of dangerous area. Move to fresh air. If symptoms persist, call a physician.
- 4.1.2 **Skin Contact:**  
Wash off immediately with plenty of water. In the case of skin irritation or allergic reactions see a physician.
- 4.1.3 **Eye Contact:**  
Rinse immediately with plenty of water, also under the eyelids. Call a physician immediately.
- 4.1.4 **Ingestion:**  
Do not induce vomiting. Clean mouth with water and afterwards drink plenty of water. Consult a physician.
- 4.2 **Most important symptoms and effects, both acute and delayed**  
None.
- 4.3 **Indication of any immediate medical attention and special treatment needed**  
Treat symptomatically.

**SECTION 5: Firefighting measures**

- 5.1 **Extinguishing media**
- 5.1.1 **Suitable Extinguishing Media:**  
The product itself does not burn.  
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- 5.1.2 **Extinguishing Media to Avoid:**  
high volume water jet. .
- 5.2 **Special hazards arising from the substance or mixture**  
In the event of fire the following can be released: Hydrogen chloride gas.
- 5.3 **Advice for firefighters**
- 5.3.1 **Special Protective Equipment:**  
Wear positive pressure self-contained breathing apparatus. Wear full protective clothing.
- 5.3.2 **Additional Information:**  
Spray down fumes resulting from fire. Firefighting water reacts corrosive.

**SECTION 6: Accidental release measures**

- 6.1 **Personal precautions, protective equipment and emergency procedures**  
See chapter 8.2.2  
Ensure adequate ventilation.
- 6.2 **Environmental precautions**  
Do not let product enter drains. Contact the proper local authorities.
- 6.3 **Methods and material for containment and cleaning up**  
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Dispose of as special waste in compliance with local and national regulations
- 6.4 **Reference to other sections**  
None.

**SECTION 7: Handling and storage**

- 7.1 **Precautions for safe handling**
- 7.1.1 **Precautions for Safe Handling:**  
Avoid contact with the skin and the eyes. Take off all contaminated clothing immediately.  
When using, do not eat, drink or smoke.
- 7.1.2 **Precautions in Case of Fire and Explosion:**  
The product is not flammable. No special precautions required.
- 7.2 **Conditions for safe storage, including any incompatibilities**
- 7.2.1 **Storage Instructions:**  
acid resisting floor
- 7.2.2 **Store away from:**  
Incompatible with oxidizing agents. bases
- 7.2.3 **Further Information on Storage Conditions:**  
None.
- 7.3 **Specific end use(s)**  
n.av.

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**SECTION 8: Exposure controls/personal protection****8.1 Control parameters****Material**

Dialuminium chloride pentahydroxide

**Limit Value**TLV dust: 10 mg/m<sup>3</sup> (respirable fraction); 3 mg/m<sup>3</sup> (alveole passing fraction)**8.2 Exposure controls****8.2.1 Appropriate engineering controls**

Keep container tightly closed. Do not remove screw cap until immediately ready for use.

Re-open used containers with caution.

**8.2.2 Individual protection measures****8.2.2a Respiratory Protection:** In case of insufficient ventilation, wear suitable respiratory equipment.

Breathing apparatus with filter.B-P2

**8.2.2b Hand Protection:**

protective gloves; Viton, Break through time &gt; 8h.

The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

**8.2.2c Eye Protection:**

tightly fitting safety goggles

**8.2.2d Skin Protection:**

lightweight protective clothing

**8.2.2e Further Information:**

Observe wearing time limits:

**8.2.3 Environmental exposure controls:**

n.av.

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****9.1.1****Form:** liquid**Colour:** colourless- light yellow**Odour:** not significant**Odour threshold:** n.av.**9.1.2**

pH-value, undiluted:

2,5 - 4,4

pH-value, 1% aqueous solution:

n.av.

**9.1.3**

Boiling point / Boiling - range (°C):

110, Melting point / Melting range (°C): -7

**9.1.4**

Flash point (°C):

n.ap., closed cup

**9.1.5**

Flammability (EEC A10/A13):

n.ap.

**9.1.6**

Ignition temperature (°C):

n.ap.

**9.1.7**

Autoflammability (EEC A16):

n.ap.

**9.1.8**

Oxidising properties:

None.

**9.1.9**

Explosion hazard:

No.

**9.1.10**

Explosion limits (Vol.%) lower:

n.ap., upper: n.ap.

**9.1.11**

Vapour pressure:

n.ap.

Vapour density (Air = 1):

n.av.

**9.1.12**

Density (g/ml):

1,31- 1,40

**9.1.13**

Solubility (in Water):

soluble

Soluble in:

Soluble in polar solvents

**9.1.14**

Partition coefficient, n-Octanol / Water:

n.ap.

**9.1.15**

Viscosity:

10 – 20 mPa\*s

**9.1.16**

Solvent content (m %):

n.ap.

**9.1.17**

Thermal decomposition (°C):

&gt; 200

**9.1.18**

Evaporation rate:

n.av.

**9.2****Other information**

n.av.

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**SECTION 10: Stability and reactivity**

- 10.1 **Reactivity**  
None.
- 10.2 **Chemical stability**  
Stable under normal conditions.
- 10.3 **Possibility of hazardous reactions**  
No dangerous reaction known under conditions of normal use.
- 10.4 **Conditions to avoid**  
Temperatures above 50°C.
- 10.5 **Incompatible materials**  
metals, bases
- 10.6 **Hazardous decomposition products**  
Hydrogen chloride gas.

**SECTION 11: Toxicological information**

- 11.1 **Information on toxicological effects**  
 Acute Health Effects:  
 Inhalation: n.av.(OECD 403)  
 Ingestion: > 2000 mg/kg (OECD 401)  
 Skin Contact: > 2000 mg/kg OECD 402  
 Skin corrosion / irritation: n.av.(OECD 404)  
 Serious eye damage / irritation: n.av.(OECD 405)  
 Respiratory or skin sensitisation: None.  
 Germ cell mutagenicity: n.av.  
 Carcinogenicity: n.av.  
 Reproductive toxicity: n.av.  
 STOT-single exposure: n.av.  
 STOT-repeated exposure: n.av.  
 Aspiration hazard: n.av.
- 11.1.1 – **Practical Experience**  
 11.1.11 n.av.  
 11.1.12 Practical Experience  
 Observations relevant for classification:  
 None.  
 Further Observations:  
 Allergic appearance  
 Classification of the preparation has been done by calculation in accordance with EEC directives.

**SECTION 12: Ecological information**

- 12.1 **Toxicity**  
LC<sub>50</sub>; 96h; Zebra Fisch : 100 – 500 mg/l
- 12.2 **Persistence and degradability**  
Can be eliminated from water by flocculation.
- 12.3 **Bioaccumulative potential**  
n.av.
- 12.4 **Mobility in soil**  
n.av.
- 12.5 **Results of PBT and vPvB assessment**  
This mixture contains no substances which are assessed to be PBT or vPvB.
- 12.6 **Other adverse effects**
- 12.6.1 COD-Value, mg/g: n.ap.
- 12.6.2 BOD5-Value, mg/g: n.ap.
- 12.6.3 AOX-Remarks: n.ap.
- 12.6.4 Significant Components: None.
- 12.6.5 Other adverse effects: None.

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**SECTION 13: Disposal considerations****13.1 Waste treatment methods**

13.1.1 Recommendation: R 3/4, D 5/9

Waste - Code - No.: 06 03 14 (VeVA/OMoD)

The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

In addition comply with the regional authorities.

**13.2 Contaminated Packaging**

13.2.1 Recommendation: Wash with suitable cleaner. Otherwise as described under Residues.

Packaging that cannot be cleaned should be disposed of as for product

13.2.2 Safe Handling: As described under Residues.

Handle in accordance with good industrial hygiene and safety practice.

**SECTION 14: Transport information**

	<b>ADR</b>	<b>IMDG</b>	<b>IATA</b>
14.1	ADR Not a dangerous substance as defined in the above regulations. <b>UN number</b>		
14.2	<b>UN proper shipping name</b>		
14.3	<b>Transport hazard class(es)</b>		
14.4	<b>Packing group</b>		
14.5	<b>Environmental hazards</b>		
14.6	<b>Special precautions for user</b>  Transport category: Classification Code: Hazard - No.: LQ:		Packing Instructions (Passenger) Packing Instructions (Cargo)
14.7	<b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	None.	

**SECTION 15: Regulatory information**15.1 **Safety, health and environmental regulations/legislation specific for the substance or mixture**  
n.av.15.2 **Chemical safety assessment :**

A chemical safety assessment has not been carried out.

**SECTION 16: Other information****Text of H phases mentioned in Section 3**

This datasheet has been compiled in accordance with EU regulation 2015/830.

The statements in this Material Safety Data Sheet were made to the best of our knowledge and are as accurate as possible. They are given for information only. They do not constitute a contractual guarantee of a product's properties. They must neither be altered nor transferred to other products.

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