

# Struvite protective agent



Efficient protective agent for preventing and reducing hard deposits

## How deposits form

Under certain conditions, crystallisation can occur during the operation of biogas plants. This can lead to problems with deposits in pipelines carrying percolate.

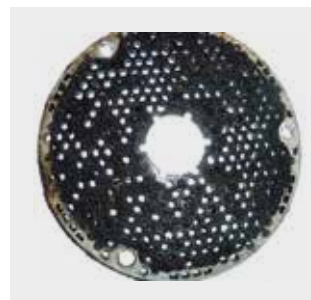
Changes in temperature and pH can lead to the formation of deposits, which is especially common with heat exchangers, pumps, nozzles and other outlets, pipelines and filter systems. Deposits cause operating faults and plant downtime, leading to additional cleaning and maintenance.

## Preventing deposits

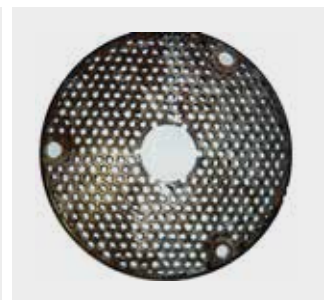
Deposits are dissolved chemically by adding crystallisation inhibitors. The struvite protective agent is a modified phosphonate and polycarboxylic acid combination that effectively prevents deposits.

## Advantages of the protective agent

- Low investment costs
- Quick and easy to install
- Increases operational reliability by maintaining flow/throughput in pipes
- Boosts plant availability
- Easy monitoring
- Universally usable
- Applicable for both dry and wet anaerobic digestion



RotaCut sieve without the use of the protective agent



Using the protective agent significantly reduces deposits

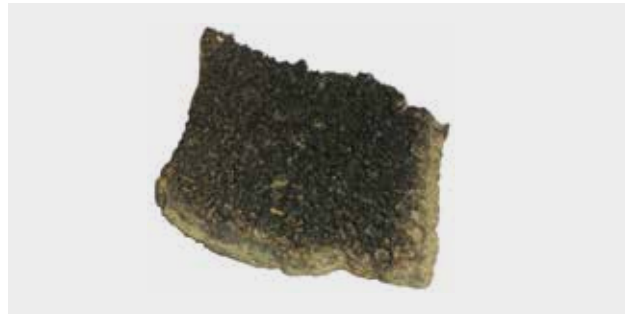
### How the protective agent is used

Continuous dosing of the struvite protective agent inhibits the growth of crystals. This prevents the formation of hard crusts and deposits. However, it does not dissolve existing deposits.

### Properties of the protective agent

The struvite protective agent is an aqueous solution of a phosphonic acid salt and copolymer sodium salt. It is assigned to water hazard class 1 and is not subject to the German Hazardous Incident Ordinance. It has a pH of 6–6.5 and is not flammable. Frost-proof storage is not necessary. The struvite protective agent is available as follows:

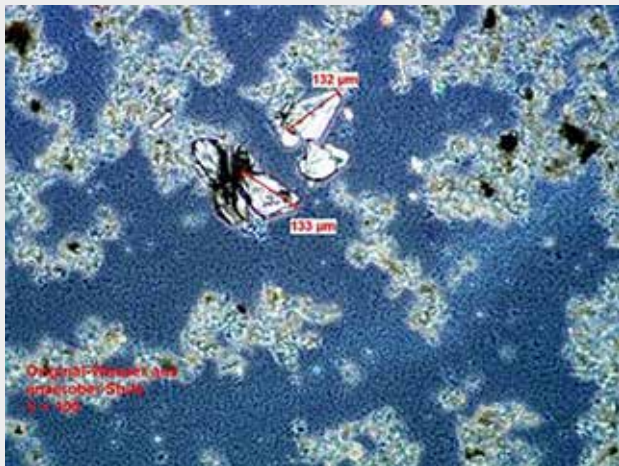
- 25 kg canister
- 200 litre drum
- IBC container



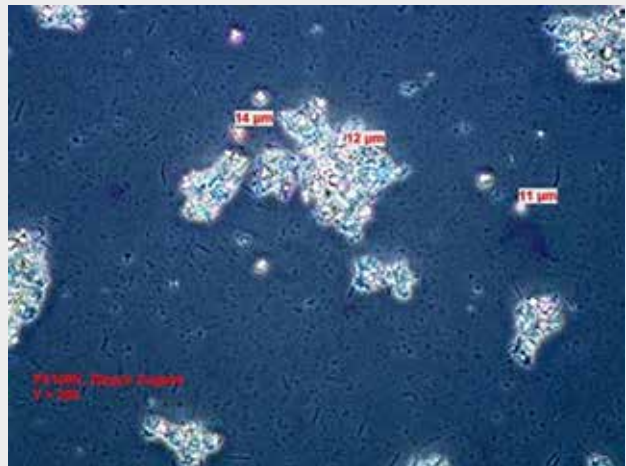
The protective agent counteracts the formation of deposits such as this in pipelines



Crystallisation is reduced



Percolate without protective agent



Percolate with 20 ppm struvite protective agent

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