Caflon Floc[™]

Water-based dispersion polymers

Univar Solutions

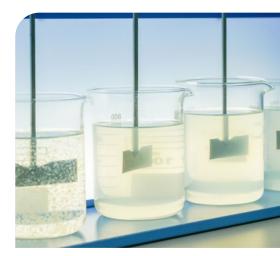
Caflon Floc[™] Water-based dispersion polymers

Univar Solutions is proud to offer water-based dispersion polymers within the water treatment industry. These flocculants provide a wide range of benefits when compared with emulsion and powder flocculants. Our products are both **sustainable** and safe for tackling sludge, dewatering and physico-chemical treatment of wastewater. In addition, they also offer increased efficiency and reduce the need for CAPEX Investment.

Comparison against other technologies

Today the market is still predominantly using Powder & Emulsion flocculants. However, these products suffer from certain disadvantages that can only be solved by moving towards water-based flocculants. These water-based products barely need any dissolution time and can even be added directly when necessary. This means they need limited to no equipment to be dosed. Combine this with the fact you also need less water to dilute the product and you quickly save on water and energy costs. The fact they can be blended with other polymers makes them very efficient and often improves the flocculation by having a larger scope to tackle any challenge.

| | WATER BASED DISPERSIONS | EMULSION PRODUCTS | POWDER PRODUCTS |
|--|-----------------------------|---------------------------------------|--|
| Application | Very cheap equipment | Expensive equipment | Very expensive equipment |
| Before Use | No stirring needed | Stirring recommended | Hygroscopic products provoke aggregates |
| Solubility | Complete between 0.1%-5% | Minimum concentration is needed | Loss of performance because of uncompleted dissolution |
| Dissolution time | < 45 sec (90% dissolved) | > 30 min | > 60 min |
| Water quality affects in dissolution | × | \checkmark | \checkmark |
| VOC's Increase | × | \checkmark | × |
| Direct application | √ | × | × |
| COD & BOD Increase | × | \checkmark | X |
| Freezing Temperature | Very low | Low | N/A |
| Shelf life | 9 months | 6 months | 12 months |



Key Benefits & Properties

SUSTAINABLE

- Free of solvents, oils and surfactants
- Lower carbon footprint
- No emission of VOC's

EASY TO USE

- Direct dosing possibility
- Only static mixer required
- Allows blends with other polymers

EFFICIENT

- Most effective active polymer exploitation
- Low-cost dosing equipment
- No BOD added to the system

Product Portfolio

Just like powder and emulsions, our products are based on acryl amide with varieties in ionic charge and molecular weight. Our technology also allows crosslinked polymers which are known to offer great performance in sludge dewatering when using centrifuges. Below is our core product portfolio, but we also have the ability to blend or create specialized flocculants adapted to your needs.

| PRODUCT | ТҮРЕ | CHARGE | MOLECULAR WEIGHT | CROSSLINKING |
|----------|------------|---------------|---------------------|--------------|
| 0052 RD | Cationic | Very Low | High | - |
| 0003 RD | Cationic | Low | Medium | - |
| 0004 RD | Cationic | Very High | Low | - |
| 325 RD | Cationic | Low | Medium | - |
| 525 RD | Cationic | Very Low | High | - |
| 03 GT | Cationic | Low | High | - |
| 06 GT | Cationic | High | High | - |
| 328 GT | Cationic | Low | High | - |
| 599 GT | Cationic | Medium | Very high | - |
| 899 GT | Cationic | Very High | Very High | - |
| 059 XT | Cationic | Medium | - | Very high |
| 0559 XT | Cationic | Medium | - | Medium |
| 089 XT | Cationic | High | - | High |
| 0637 XT | Cationic | High | - | Medium |
| 0889 XT | Cationic | High | - | Medium |
| 2301 WD* | Cationic | Low | High | - |
| 223 WZ | Amphoteric | Low | Medium | - |
| 111 WZ | Amphoteric | Medium | Medium | - |
| 0002 OG | Nonionic | Extremely Low | High | - |
| 0317 OG | Anionic | Medium | Extremely High | - |
| 0302 OG | Anionic | Low | Very High | - |
| 7705 OG | Anionic | High | Very High | - |
| 3178 AG | Anionic | Low | High | - |
| 5317 WD* | Anionic | Medium | Extremely High | - |



Typical Characteristics

| Appearance: | Opaque white liquid |
|------------------------|---|
| Density: | 1,2 kg/m³ |
| Suggested Dilution: | 10 kg per m³ (1%) |
| Shelf life: | We recommend a maximum storage time of 9 months |

* Drinking water approved products





Contact:

For more information on this range of Products please contact your local Univar Solutions representative.

watertreatment@univarsolutions.com

www.univarsolutions.com

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