



## DamClear Self Dispersing Flocculants

### Product Description

DamClear Self Dispersing (SD) Flocculants are a granulated version of the more common powder grade flocculants. The granulation process incorporates a binder that enables the product to dissolve in water without the need for traditional pre-wetting devices that are otherwise required to prevent formation of insoluble gels. SD Flocculants are supplied at a controlled particle size of 1-3.5 mm

When dissolved in water DamClear SD Flocculants are used for water clarification on construction sites, in storm water retention dams, mine water dams, farm dams and for wastewater clarifiers. It is low cost, fast acting, environmentally safe & does not affect water pH or salinity. It contains no heavy metals, iron or aluminium.

DamClear SD is also used for soil erosion control on farms during flood irrigation and on constructions sites. DamClear reacts with sediment causing solids to settle rapidly leaving a clear treated water. Both anionic and cationic grades are available.

### Product Features



- Low application rates ✓
- Fast acting ✓
- Good aquatic toxicity ✓
- Safe for Fish ✓
- Does not affect water pH
- Low cost ✓
- Does not affect water salinity ✓

DamClear SD is available in 3 grades, two anionic polymer grades and one cationic polymer grade.

### Advantages Over Powder Flocculants

- **Dust Free**  
User friendly product, no dust dispersed in plant area resulting in a safer work environment.
- **Self dispersing**  
No specialised wetting heads or venturi required to pre-wet the product. Just meter SD Flocculants directly into a mixing tank via a screw feeder. No lumps & "fish eyes" due to poorly wetted product.

- **Ease of use**  
DamClear SD significantly improves materials handling, simplifies floc mixing system design & lowers capital cost & equipment complexity. Provides a very easy to use product for plant personnel.
- **Free flowing**  
No special vibrator required to assist product discharge from storage hoppers.
- **Large particle size**
  - In **agricultural** applications the larger particle size helps to retain product in flooded irrigation furrows.
  - In **drilling** applications improves polymer penetration into deep bore holes.
  - In **water clarification** applications, direct injection enables "multi-stage" type dosing, for improved performance and cost effectiveness.

### Typical Applications

DamClear SD Flocculants are best suited to applications that have a high flocculant demand or that will operate for extended periods of time as this offsets the capital cost for tanks, mixers & dosing pumps.

This product is suitable for applications that are environmentally sensitive. Clarified water, will in most cases be suitable for discharge to rivers and streams.

- **Road Construction**  
Clarification of storm water run-off in Sediment Retention Basins for road, rail and tunnel construction
- **Dam Water**  
Clarification of clay contaminated river and dam water for live stock, irrigation and horticulture and for ascetic improvement.
- **Construction Sites**  
Clarification of storm water on building sites, and commercial & residential developments.
- **Iron Removal**  
Clarification of iron contaminated ground water.



## DamClear Self Dispersing Flocculants

### • Trade & Industrial Wastewater

Clarification of trade & industrial wastewater to remove solids and to thicken sludge.

### • Mines & Quarries

Clarification of storm water run-off from mining operations & stock piles at rock, sand & gravel quarries. Clarification of water from drilling operations

### • Biological Wastewater

Sludge settling aid and for thickening & clarification of food processing wastewater and sewage wastewater.

### Application Instructions

DamClear SD may be added dry in some applications in Agriculture, bore hole drilling & water clarification. In other applications it should first be dissolved in water as described below. Flocculant forms viscous solutions when dissolved in water & this limits the stock solution concentration to a maximum of 4 g/L.

#### 1. Prepare SD Floc Solution

- To prepare a 200 L stock solution dissolve 0.7 kg (~1.2 Litres) of powder in 200 L of water, or
- For a 1,000 L stock solution dissolve 3.5 kg (~6 Litres) of powder in 1,000 L of water.
- Preweigh DamClear SD in a dry bucket. Add to a half-full tank. Fill tank with water & mix the solution for one hour using either an air sparge or low speed, low shear mixer. Do not over-mix. The solution should be lump free.

#### 2. Add DamClear SD Floc Solution To Process

- Add DamClear SD solution to water to be clarified by metering at a controlled rate using a pump.
- If possible dilute 1:10 as the floc solution is being metered. This aids product dispersion & performance
- Typical dose rate for a dam is 0.5-5.0 mg/L (0.5-5 kg per Megalitre). A 1,000 L stock solution should treat approximately 1-2 million litres of water.

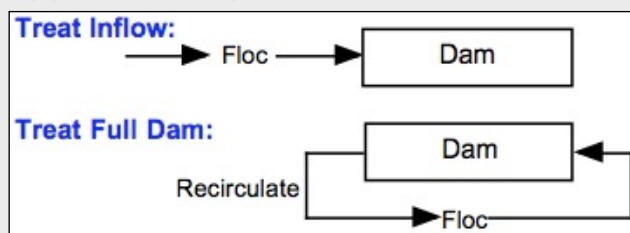
#### • Drip Feed or Metering Pump

DamClear SD can be added at a controlled rate into dam feed water pipe or into a recirculating water flow by drip feed or metering pump.

Water clarity and solids settling rate improves with increasing dose rate. Do not overdose.

Determine quantity required before application to dam or process, by using jar tests on 500 mL samples of water. Free water test kits with instructions are available from Environmental Warehouse.

### Application Options for Dams:



### Ordering Information

Three grades of DamClear SD are available.

- **DamClear A10SD**  
Generally best suited to sediments and clays, and to applications where water pH is acidic (< 6.5) and where the salinity is relatively high (> 500 conductivity). It is generally the best option where chemical pretreatments such as Alum are applied prior to flocculant.
- **DamClear A30SD**  
Generally best suited to sediments and clays, and to applications where water pH is around neutral (7-9) and where the salinity is relatively low (< 400 conductivity).
- **DamClear C30SD**  
Generally best suited to biological sludge such as sewage and food wastewater treatment in dams, DAF's and settling tanks and for sludge dewatering.

#### Pack Sizes:

All DamClear SD Floc grades are available in 1kg and 11kg drums with resealable lids.

The MSDS is available from our website.