



# Reolam CS 218

## Chemical description

Amino resin in aqueous solution

## Main use

Casting rate enhancer.

## Typical values

Appearance : homogeneous liquid

Density at 20°C: 1037 -1047 gr/l

pH: 4 - 6

## Properties

REOLAM CS 218 promotes the aggregation of the finest particles of water-based ceramic slips, increasing the permeability and speeding-up the flow of water from the slip to the plaster or resin mould.

REOLAM CS 218 is suitable to be used for sanitaryware, tableware, technical ceramics, filter-pressing of ceramics and minerals.

The main result is the increase of casting rate and consequently the reduction of casting time, both in traditional and pressure casting.

Other advantages using REOLAM CS 218 are:

- better uniformity of moisture in the body
- better uniformity of density in drain casting
- better consistency of casting parameters

## Applications

REOLAM CS 218 gives more evident results in medium and high pressure casting slip, allowing to increase the number of the casting cycles per day.

In traditional casting process REOLAM CS 218 might be quite useful when the slip contains an high amount of very fine fraction, due to plastic raw materials like clays and kaolin, or produced by prolonged grinding. Even if the number of casting per day may not vary, the reduction of casting time allows an improvement in quality, leaving more time to dry the moulds and for fettling the items.

The addition of the REOLAM CS 218 slightly increases viscosity and thixotropy; most of the time these increments are not significant and disturbing especially in high/medium pressure casting.

If viscosity and/or thixotropy turn to be too high, adding a slight amount of deflocculant (we suggest polyacrylates - i.e. Reotan HS) is usually sufficient to come back to suitable casting parameters, maintaining benefits for the casting rate.

The increase of water content and shrinkage in the casted body are usually negligible.

Mechanical strength of green pieces is practically not affected too.

The following table shows as reference the different behaviour between a good sanitaryware slip and the same slip with the addition of 0.10% REOLAM CS218, as tested with a Baroid cell test.

	Reference Slip	+ 0.1% Reolam CS 218
Gallenkamp Viscosity	334	303
Gallenkamp Thixotropy @5'	14	51
Weight in Baroid cell *(gr)	90,3	111,9
Dry Baroid* thickness (mm)	20,4	21,2
Thickness on plaster @30' (mm)	5,9	8,4
Time to get 8 mm thickness on plaster mould (minutes)	39	26

(\* ) Baroid cell test condition; pressure 4 kg/cm<sup>2</sup>, time 30'

In the case shown above, the increase of the dry Baroid thickness is of about 24% and the thickness on the plaster of Paris mould has increased by the 42%.

## Storage and handling

In order to maintain the performance of the product, store at room temperature and protect from frost.

Shelf life : 12 months if properly stored.

## Packaging

25 kg plastic tank, 120 kg plastic drum.

## Material safety

Consult the Safety Data Sheet

[ceramics.lamberti.com](http://ceramics.lamberti.com)