Technical data sheet

esa-one paint 1A10

esa-one paint 1A10 is a chemical specialty line based on "all in one additive" technology.
It combines the functions of different additives for an easy and rapid production of waterborne paints and paste systems.
esa-one paint 1A10 speeds up the production process because it allows the reduction of the number of components in the formulation.
esa-one paint 1A10 is easy dispersible in water without any lumps formation; it dissolves without any addition of alkali.
esa-one paint 1A10, due to its particular physical form, is easy to handle and does not develop any undesiderable dust.

Chemical-physical characteristics

Chemical description:	anionic etherified macropolymers
Appearance:	ivory pellets
Moisture:	10% max
Bulk density:	0.6 - 0.8 g/ml
Solubility:	complete in hot and cold water
Brookfield RVT viscosity:	2000 - 4500 mPa*s (6% w/w water sol., 20°C, 20 rpm)
Incompatibility:	free bivalent ions

Orientative waterborne paint formulation:

|	
water	28
biocide	0.2
esa-one paint 1A10	1 - 2
titanium dioxide	1
amorphous calcium carbonate	50
crystalline calcium carbonate	15
alkali agent*	0.2
latex emulsion	4.5

*alkali agent only if necessary to adjust pH close 9

Paint characteristics:

PVC :	92 %	
Density:	1.69 - 1.72 g/ml	
esa-one paint 1A10	1.1 %	1.5 %
Brookfield viscosity 20 rpm; 20 C (mPa*s)	12000	24000
Stormer viscosity 20 C (KU)	116	136

Main applications and dosages
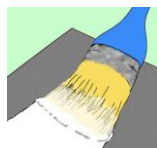
High PVC water-based paints: **0.5 - 2%**
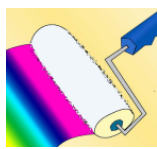
The dosages are referred to the total formulation

Brookfield viscosity curves

Packing and storage

esa-one paint 1A10 is available in 25kg multi-layer paper bags with polyethylene internal layer.
The product is hygroscopic and should be stored in its original packing in cool and dry conditions.
If stored in these conditions **esa-one paint 1A10** does not change its properties in the period of 12 months from the date of production.
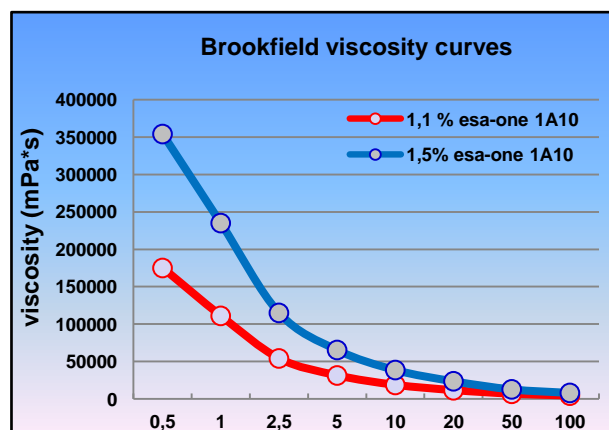
We suggest a preliminary test in the lab to find the optimal dosage of **esa-one paint 1A10** for each system considered.