CASUL® HSP1

> Product Data Sheet:

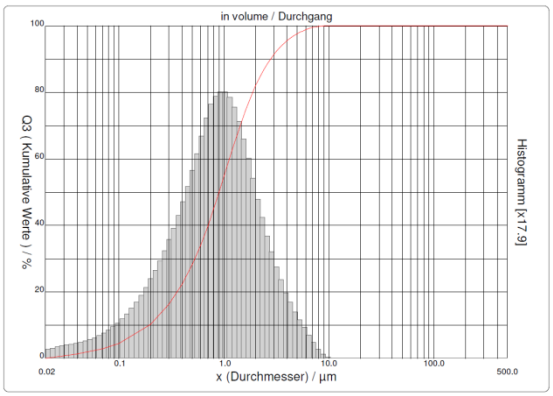
CASUL® HSP1 is a highly concentrated CASUL®-dispersion (slurry) with approx. 63% TS based on calcium aluminate sulfate.

>	Chemical composition	
■	Chemical identification:	Calcium aluminate sulfate
■	Chem. formula:	3 CaO x Al_2O_3 x 3 $CaSO_4$ x 32 H_2O
■	CaO:	approx. 13,5 %
■	Al_2O_3:	approx. 8,0 %
■	Fe_2O_3:	< 0,1 %
■	Na_2O:	approx. 0,3 %
■	Dry matter:	approx. 60 – 64 % (measured at 40°C)
■	Loss on ignition / Water of hydration:	45 %

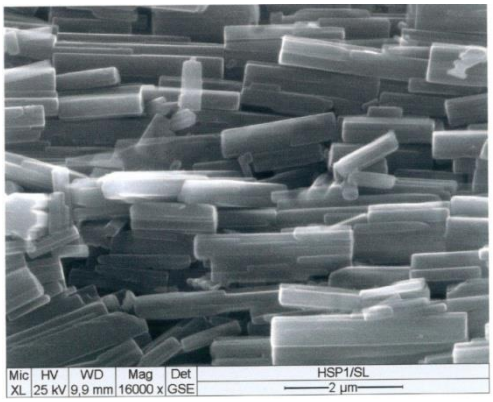
>	Technical data and properties			
■	Appearance:	white disperison		
■	Crystal habit:	needle-like		
■	Spec. gravity:	approx. 1,4 g/cm³ (20°C)		
■	pH value:	approx. 12		
■	Viscosity (Brookfield):	50 – 100 mPas (20°C)		
■	Gloss (Dr.Lange Reflectometer):	60°: approx. 25	85°: appprox. 75	
■	Whiteness (R457 with UV):	> 95 %		
■	Lab-values:	L* = 98,0	a* = -0,20	b* = -0,10
■	CIE-whiteness with UV:	94		
■	Abrasion (AT 1000):	2,6 g/m²		
■	Refractive index:	1,49		
■	Isoelectric point (IEP):	pH 9,3		
■	Particle size:	d_{10} = approx. 0,2 µm d_{50} = approx. 0,9 µm d_{90} = approx. 3,0 µm		

REMONDIS Production GmbH, GF CASUL®, Brunnenstraße 138, 44536 Lünen, Deutschland
Telefon: +49 2306 106-616, Telefax: +49 2306 106-8853, info-casul@remondis.de, www.casul.de

> Product Data Sheet:



[Particle size measurement CASUL® HSP1 (CILAS 1065; wet)]



[REM-scan CASUL® HSP1 (16.000x magnification)]

> Applications

- Due to its product properties, CASUL® HSP1 is excellently suited as a multifunctional filler for different applications

CASUL® HSP1 has a high hiding power (opacity), a high degree of whiteness and is characterized by natural adhesive properties (felting of needle-like crystals). Due to the needle-like shape and the high water content in the crystal matrix of over 45%, light, voluminous lines of high opacity and high whiteness are ensured.

CASUL® HSP1

- CASUL® HSP1 is safe for contact with food according to ISEGA report (FDA approval)
- Optimal flame retardancy - because of water of crystallization content of 45%.
- Without addition of biocides and preservatives
- Suitable for the production of biocidal and preservative-free products

Handling / Storage / Application

CASUL® HSP1 can be stored in VA- or PE-plastic containers, aluminum or non-ferrous metals are unsuitable. It is preferably delivered in tank trucks and in containers of 1000 liters per each. Prior to use, the slurry must be homogenized by stirring, in storage tanks homogenization is required about 2 to 3 times a day (homogenization in IBC 1 to 2 times a month). It should be stored frost-free and protected from direct sunlight.

Es gelten die allgemeinen Geschäftsbedingungen der **REMONDIS** Production GmbH.

REMONDIS Production GmbH, GF CASUL®, Brunnenstraße 138, 44536 Lünen, Deutschland
Telefon: +49 2306 106-616, Telefax: +49 2306 106-8853, info-casul@remondis.de, www.casul.de