

# ***CRILAT 4815***

**PURE ACRYLIC DISPERSION WITH  
NANO-PARTICLES SIZE DISTRIBUTION,  
FREE FROM SOLVENTS,  
APEO AND FORMALDEHYDE**

# SUPPLY SPECIFICATION:

SOLID CONTENT	%	31 ± 1
BROOKFIELD VISCOSITY	mPa*s (RVT 20 rpm, spindle 1)	< 100
pH	1-14	7.0 ± 1.0
MFFT	°C	5
PARTICLE SIZE DISTRIBUTION	µm	0.025 — 0.040
VOC CONTENT	%	< 0.2
DENSITY AT 23 °C	Kg/dm <sup>3</sup>	1.03
Tg	°C	15

# Applications :

Crilat 4815 is used as primer for wall surface in general: on old and new renders (well cured), before applying the top coat, over old paints even slightly chalky.

Crilat 4815 is a nanosized dispersion. Once applied on the surface, penetrates more deeply than the traditional water based primers. It works as regulator of the substrate absorption and as adhesion catalyst of the finishing coat.

Crilat 4815 ensure the consolidation of the dust present on the wall surface to treat. Thanks to the high penetration of Crilat 4815 into surface, it slows down the effloresces formation.

# Transparency is an index of the fine particles

Crilat  
4815

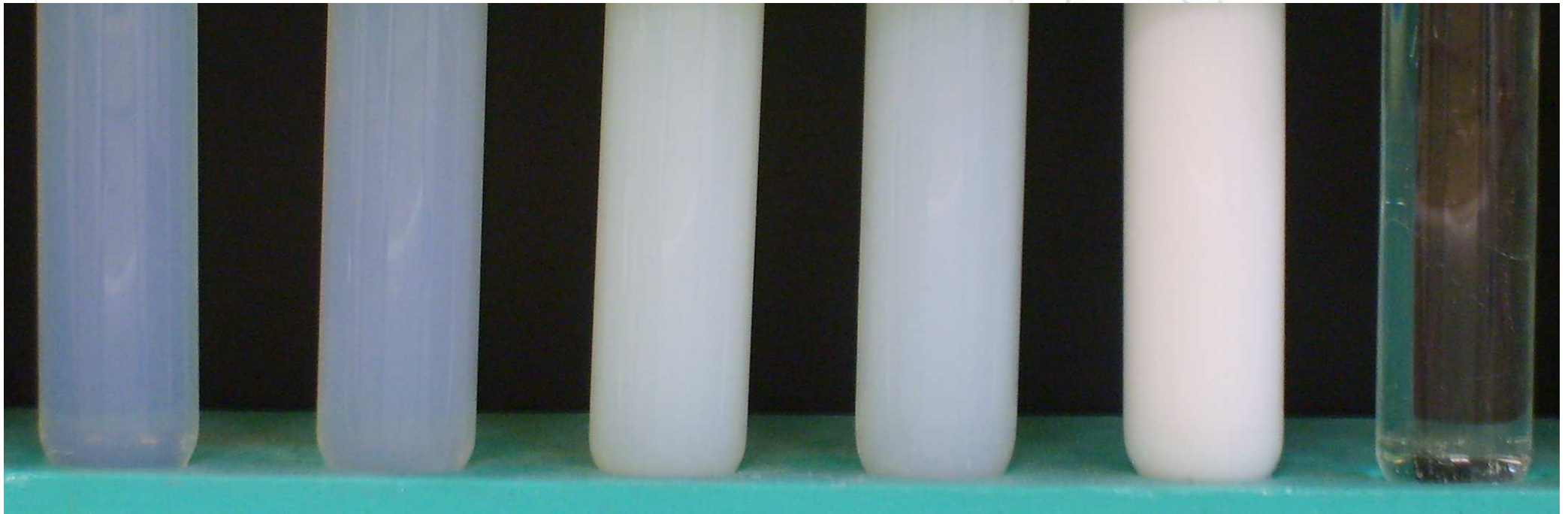
Competitor 1

Competitor 2

Competitor 3

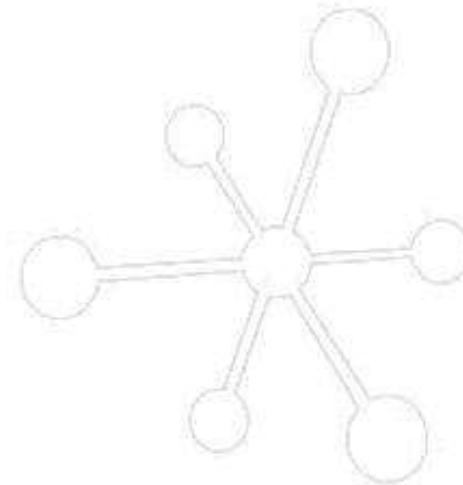
Crilat  
4818

Vinavil  
8020 SN



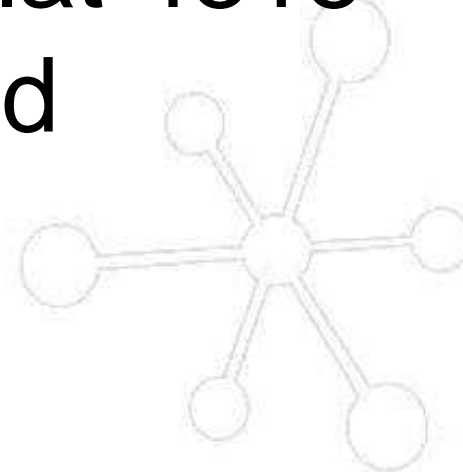
# Properties

- Solvent free
- High penetration capacity
- Consolidation effect
- Adhesion promoter
- No colour change of the surface where applied
- Barrier effect to the efflorescence



# Primer based on Crilat 4815 at 15% of solid

	w. %
. Water	49.50
. Defoamer	0.30
. Crilat 4815	50.00
. Biocide	0.20
Total 100.00	



# Mineral substrate

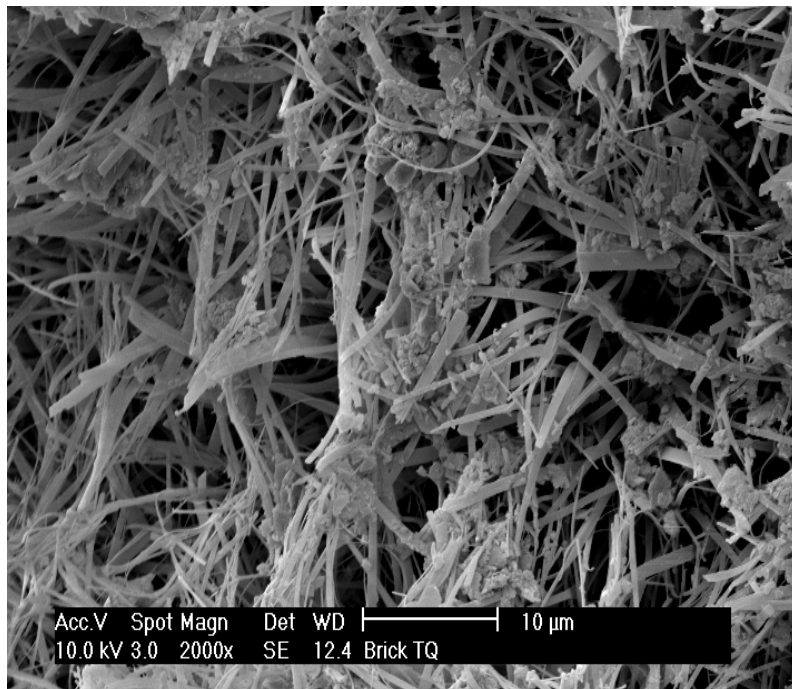


Fig. 5:  
No treated

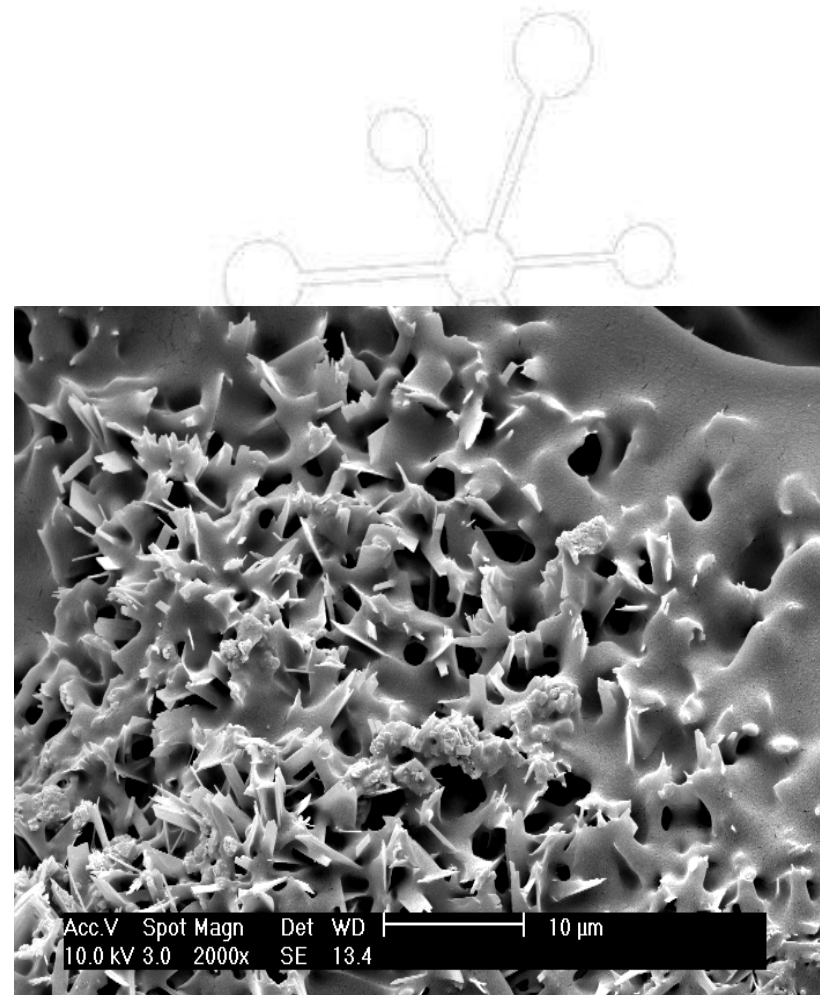


Fig. 6:  
The presence of the polymer  
does not close the porosity of the substrate.

# Quartz consolidation with primer

*Consolidation  
of quartz using the primer*



1



2

*Picture 1: 150 gr. quartz sand.  
Steel ball of 133 gr.*

*Picture 2: make an imprint.*



3



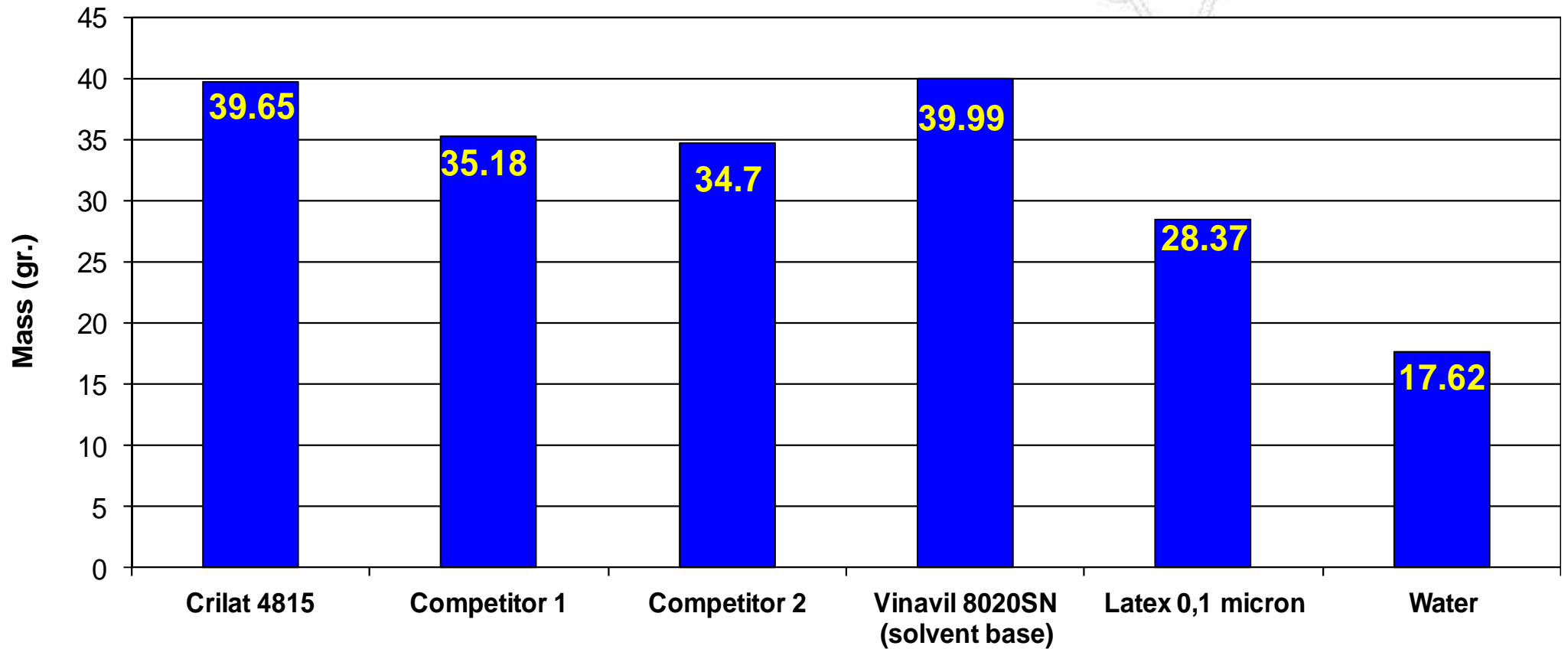
4

*Picture 3: drop 16 gr. of primer.  
Dry 24h at 23°C; 24h  
at 40°C; 24h at 23°C.*

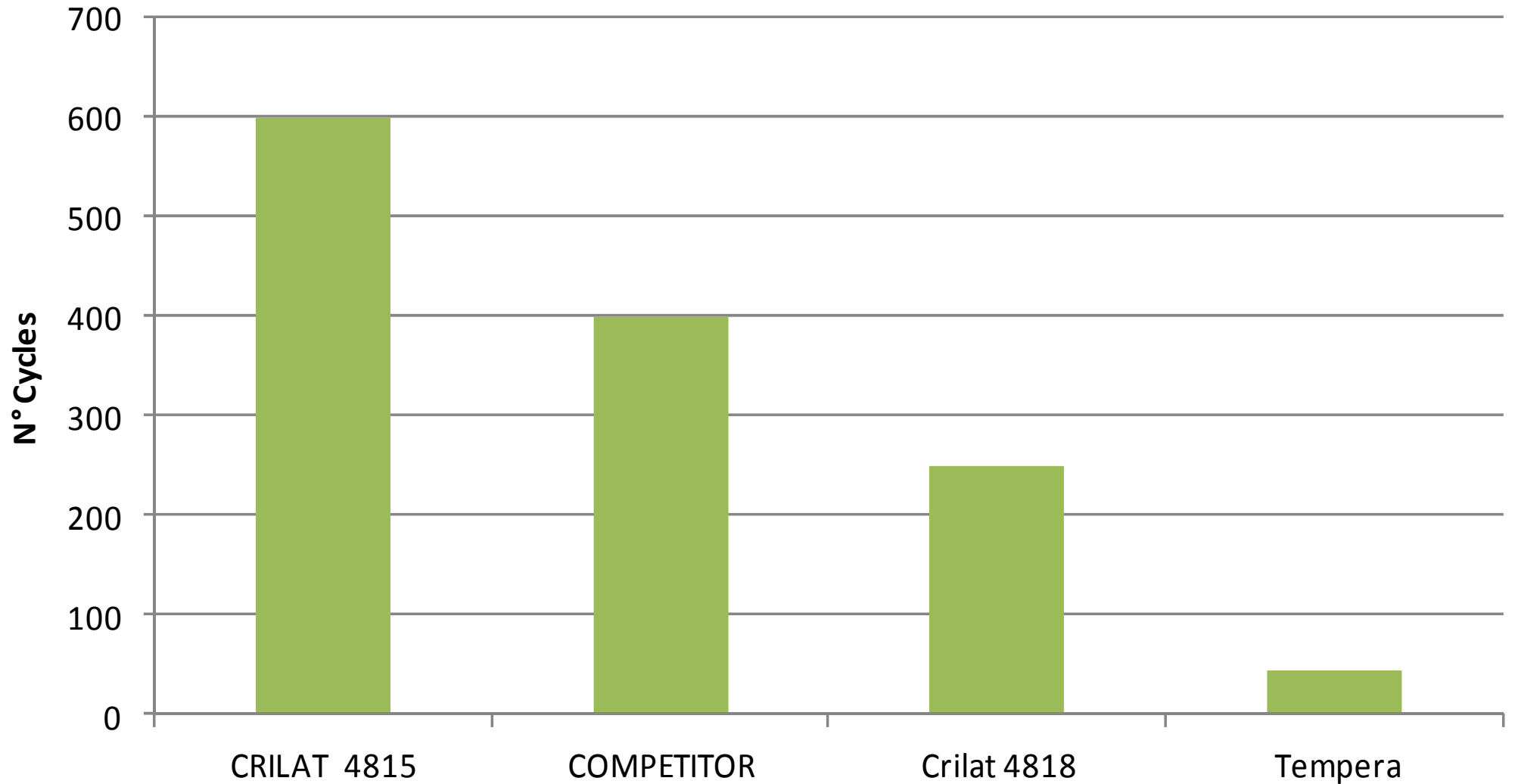
*Picture 4: weight the  
consolidated sand.*



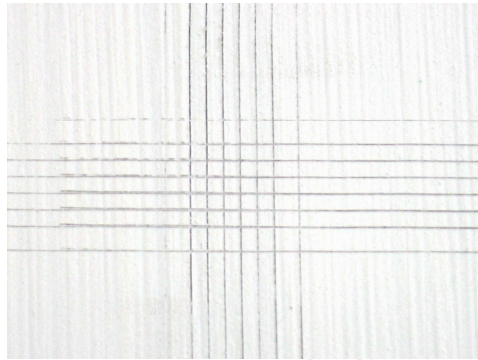
# Quartz consolidation with primer



## VERY POOR PAINT: WET SCRUB RESISTANCE (DIN53778) AFTER THE PRIMER APPLICATION



# Adhesion



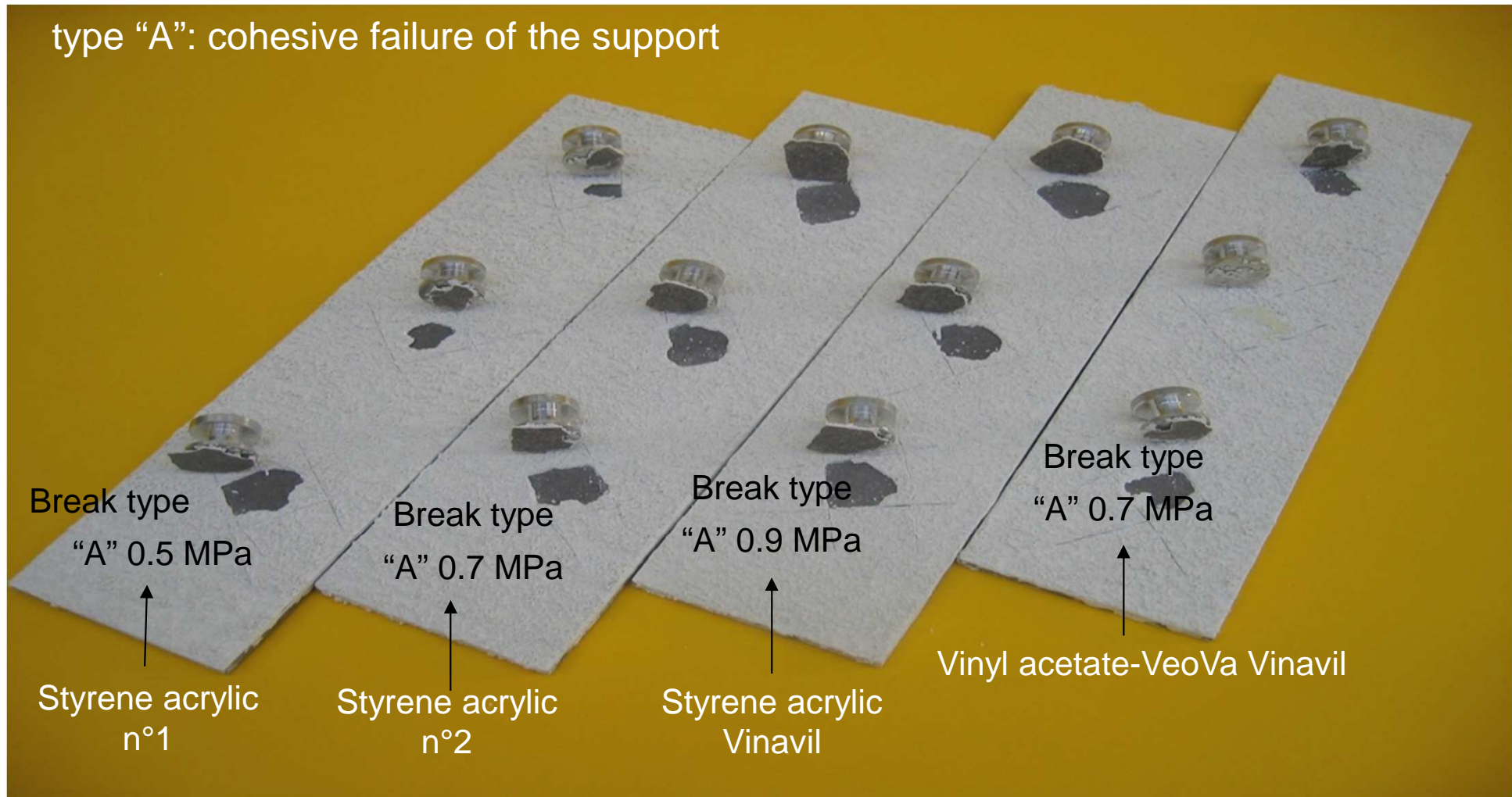
*Cross cut test according to:  
UNI EN ISO 2409*



*Pull-off test according to:  
UNI EN ISO 4624*

- Primer, based on Vinavil ST/A 0.1  $\mu\text{m}$  at 7% solid
- Wall textured coating based on different binders

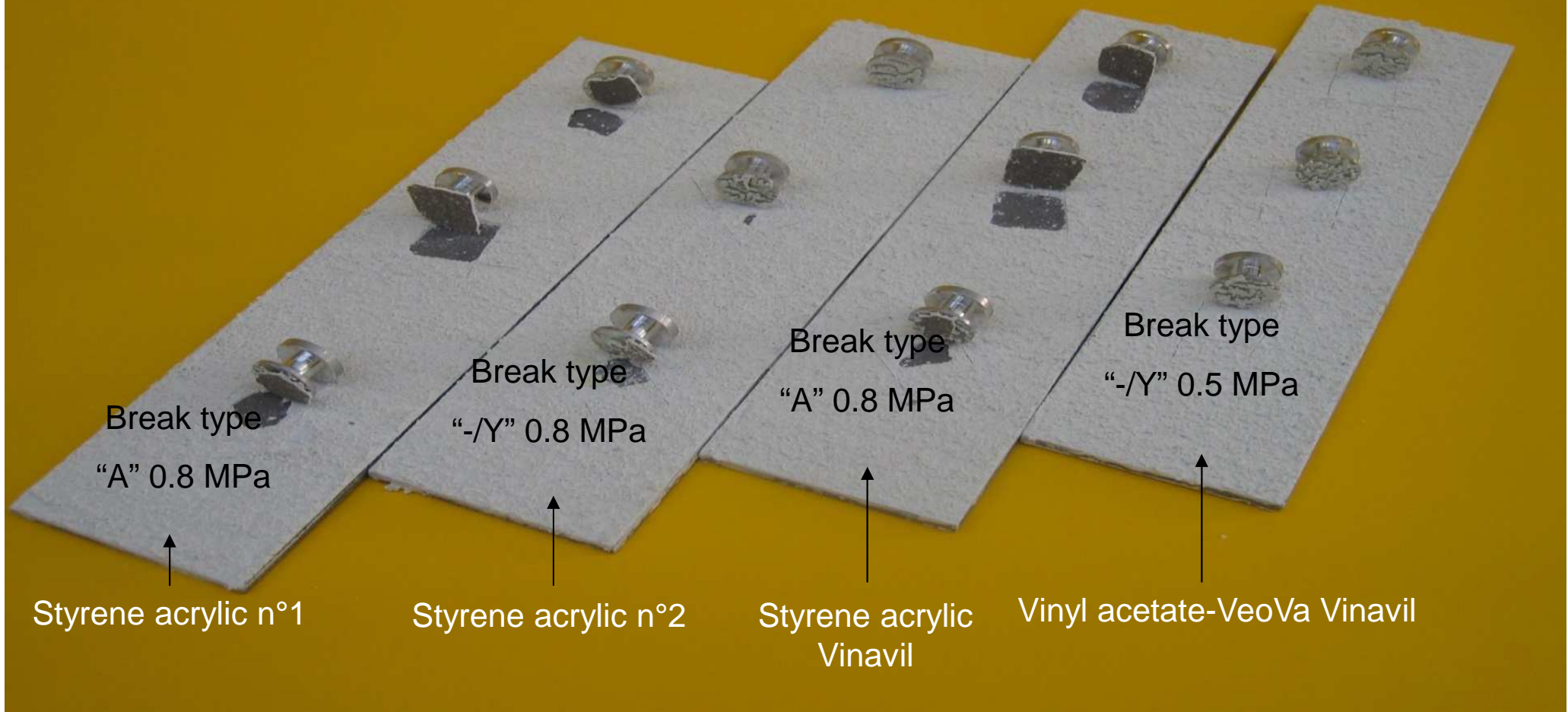
type "A": cohesive failure of the support



- Primer, based on Vinavil Nanolatex 7% solid;
- Wall textured coating based on different binders

type "A": cohesive failure of the support

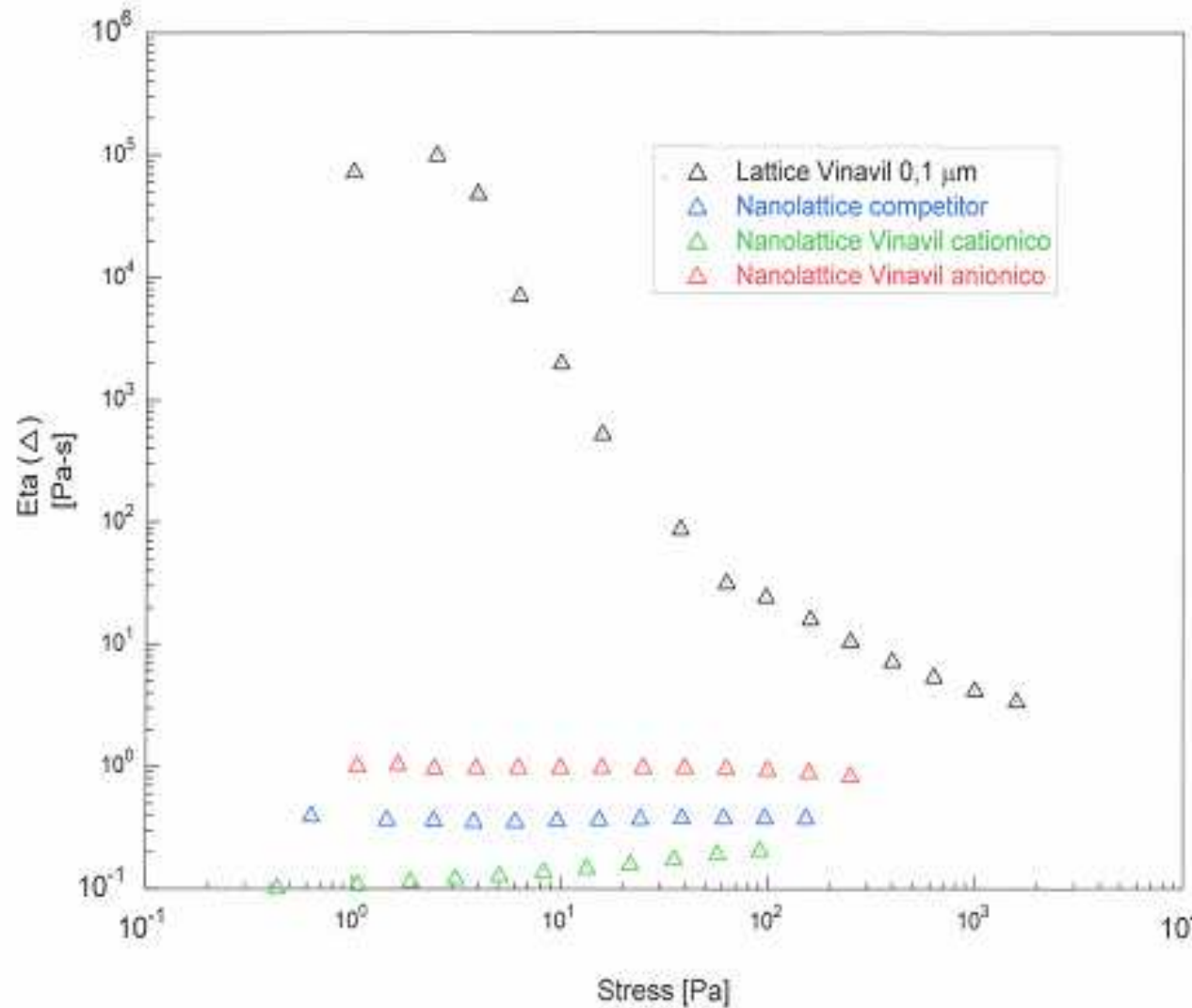
type "-/Y": adhesive failure of the bi-component adhesive and wall textured



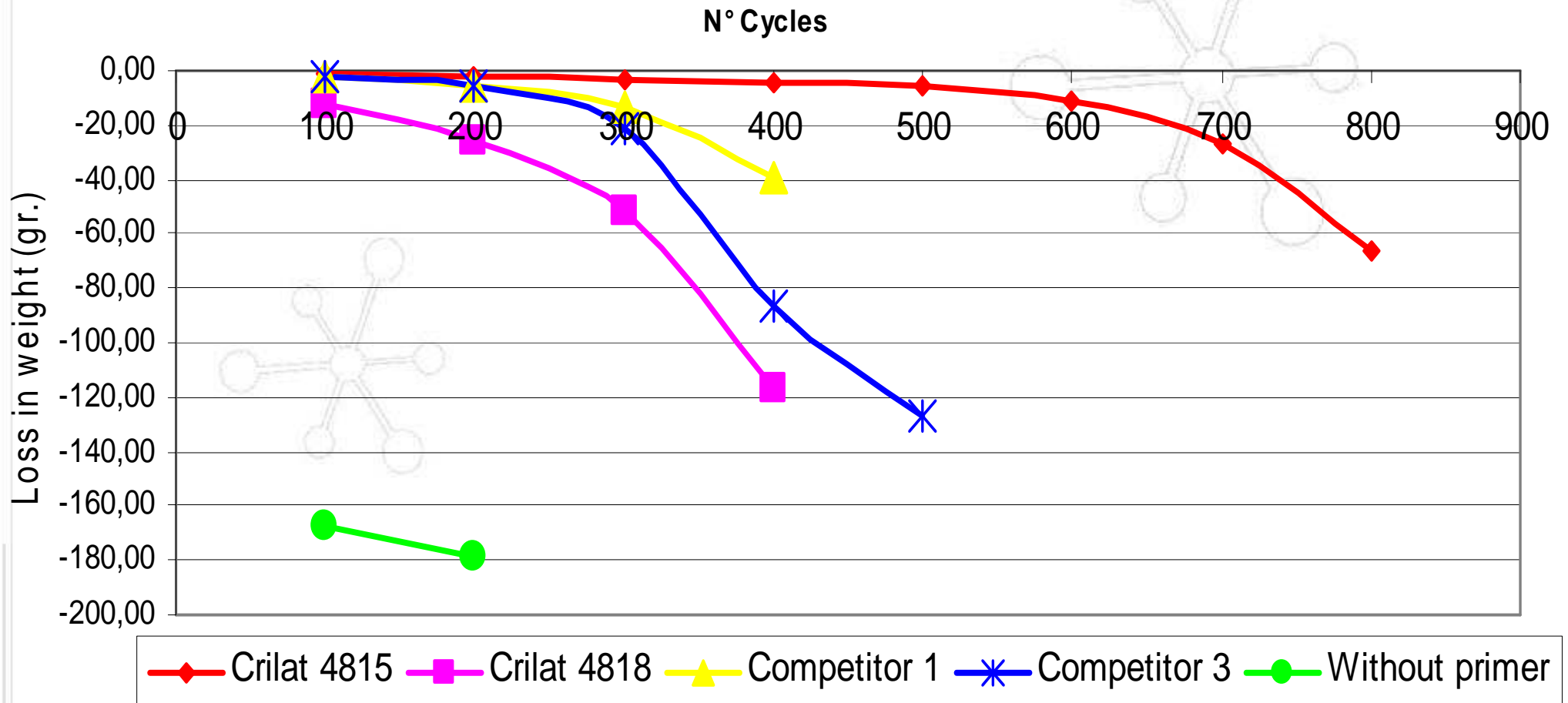
# RHEOLOGY

Crilat 4815 has a Newtonian behaviour that favours the penetration.

Curve di flusso



# Abrasion resistance of render after primer application



# Conclusion

CRILAT 4815 is suitable to prepare primer/base coat with very good consolidating properties, excellent adhesion and high penetration capacity.

Crilat 4815 is compatible with potassium silicate, cement, gypsum and the major raw materials used in paint formulation.

Crilat 4815 works as regulator for the absorption of the substrate allowing a good uniformity in the application of the final coat .