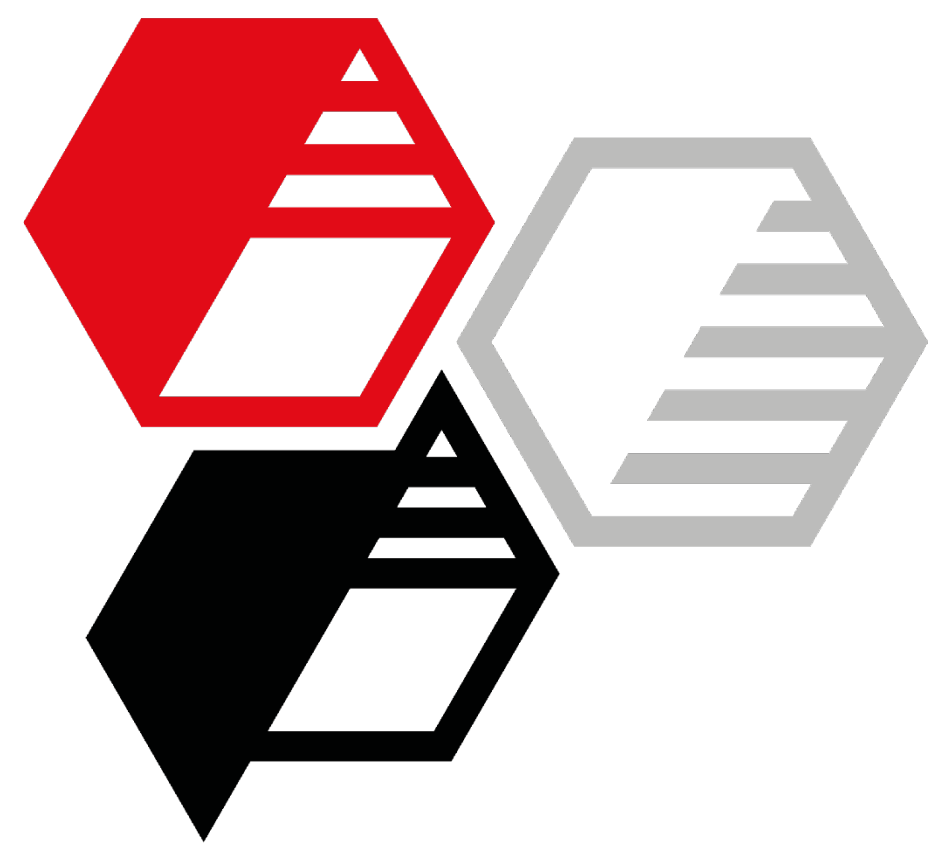


Neuburg Siliceous Earth in water-based corrosion protection alkyd primer white



Objective

Meeting stricter regulatory requirements
without compromising on adhesion or protective performance

Neuburg Siliceous Earth (NSE): Sillitin V 85, Aktisil PF 777

Formulation

Siccative-free ✓		No coalescing agent ✓	
Main filler		Talc	NSE
Pigment Preparation	Water demineralized		8.00
	WorléeDisperse 8400 W		1.00
	Rheovis PU 1333		0.45
	Rheovis PU 1291		0.15
	WorléeAdd 6410		0.20
	Kronos 2190		10.10
	Microdol Super		10.40
	HAR* Talc or Sillitin V 85	4.10	4.10
	Aktisil PF 777		8.20
	Zinc phosphate (corrosion pigment)	6.60	2.50
Let Down	Water demineralized		5.00
	Disperse with high shear rate, then add with continuous stirring		
	Water demineralized		3.00
	WorléeSol E 330 W		50.00
	Water demineralized	5.00	5.00
	WorléeAdd 458 (org. corrosion inhibitor)	1.00	1.00
Total		100.00	99.00
Solids content w/w 53 % PVC 34 %		* High aspect ratio	

Summary

Retained features

- ✓ Storage stability, levelling, drying, hardness, flexibility
- ✓ Perfect adhesion in cross cut test
- ✓ High protection level with very good wet/dry adhesion

Improved features with Neuburg Siliceous Earth

- + Talc-free way of primer formulation

Sillitin V 85 cost-effective filler that further reduces corrosive blistering/delamination effects at scribe damages

Aktisil PF 777 drives innovation for more environmentally friendly and label-free formulations saving corrosion inhibitors and zinc phosphate

Results

Single-layer 80 µm DFT 24 days drying 23°C / 50 % RH cold rolled steel

360 h Neutral Salt Spray

Talc

scribed

non-scribed area

GT 0 wet
GT 0 dry

Zinc phosphate
High content
→ CLP labeling of
formulation

Filler replacement

Sillitin V 85

Reduced blistering ✓

Reduced delamination ✓

no defects ✓

GT 0 wet
GT 0 dry

Talc-free formulation ✓

Zinc phosphate
High content
→ CLP labeling of
formulation

Filler variation + Corrosion pigment reduction

Aktisil PF 777

Comparable to talc control even without corrosion inhibitor ✓

no defects ✓

GT 0 wet
GT 0 dry

Talc-free formulation ✓

Zinc phosphate reduced
Dosage ≤ 2.5 %
→ No CLP labeling
of formulation ✓