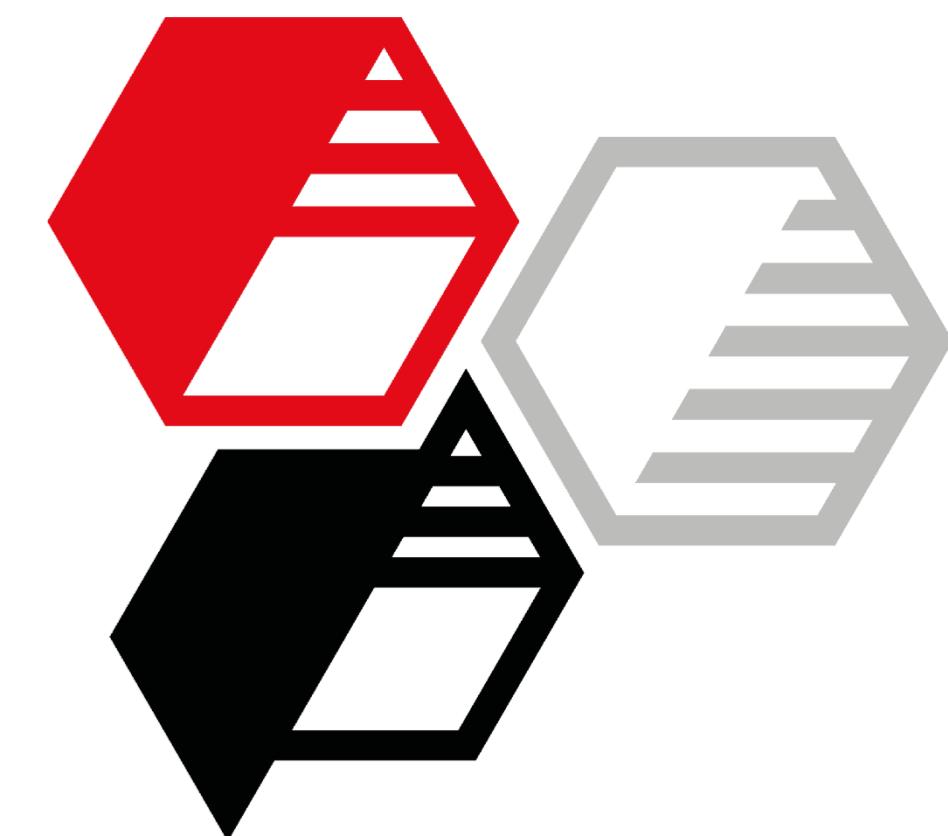
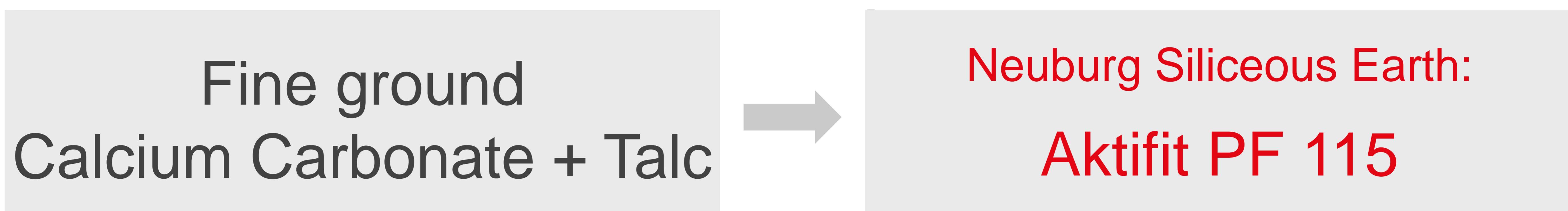


Neuburg Siliceous Earth in water-based corrosion protection acrylate primer, red



Objective

Improvement of anti-corrosion properties



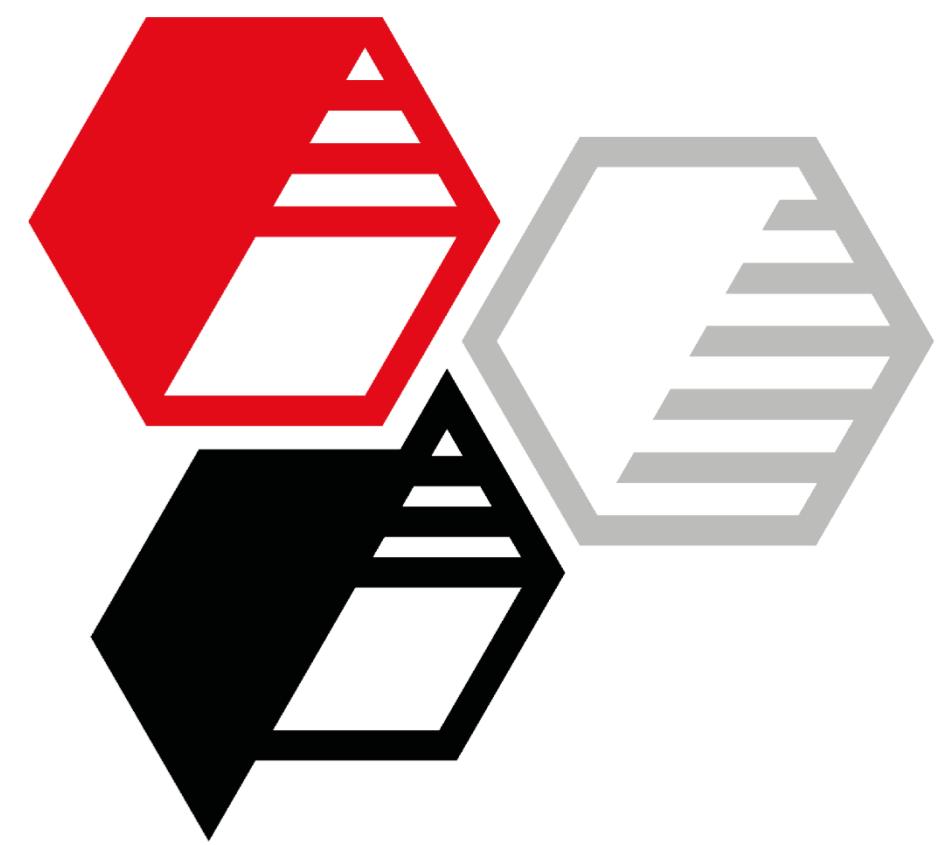
Formulation

Pigment preparation	Water demineralized		7.0	15.0
	Edaplan 490	dispersing agent	0.8	
	Byk 024	defoamer	0.1	
	Butyl glycol	co-solvent	3.0	
	Bayferrox 130 M	pigment	8.9	
		Calcium carbonate	10.5	
	Filler	Talc	3.0	
		Aktifit PF 115		13.5
	Heucophos ZPO	anti-corrosion pigment	7.0	
Let down	Heucorin RZ	org. corrosion inhibitor	1.0	
	Alberdingk SC 48	acrylic dispersion	39.7	
	Water demineralized		10.9	2.9
	Optifilm Enhancer 300	co-solvent	1.0	
	Byk 024	defoamer	0.4	
	Byk 349	wetting agent	0.1	
	Ascotran H10	flash rust inhibitor	0.5	
	Ammonia (25 %)	neutralizing agent	0.8	
	Resydrol AX 237w/70BG	epoxy-alkyd resin	4.0	
	Borchi OXY-Coat 1101	drier	0.1	
	Tafigel PUR 41	rheology modifier	1.2	
	Total [%]		100.0	
Solids content w/w [%]			56	
PVC [%]			31	

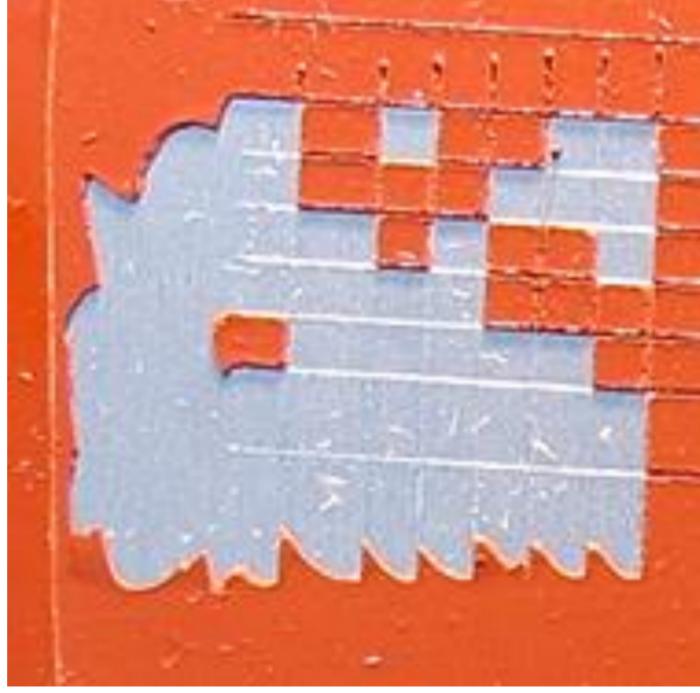
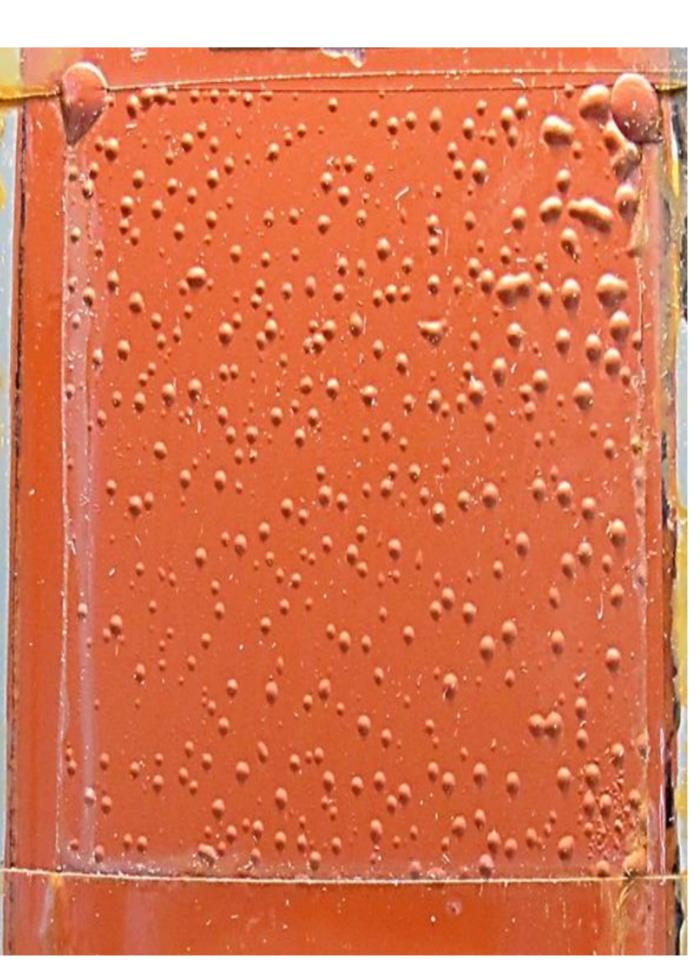
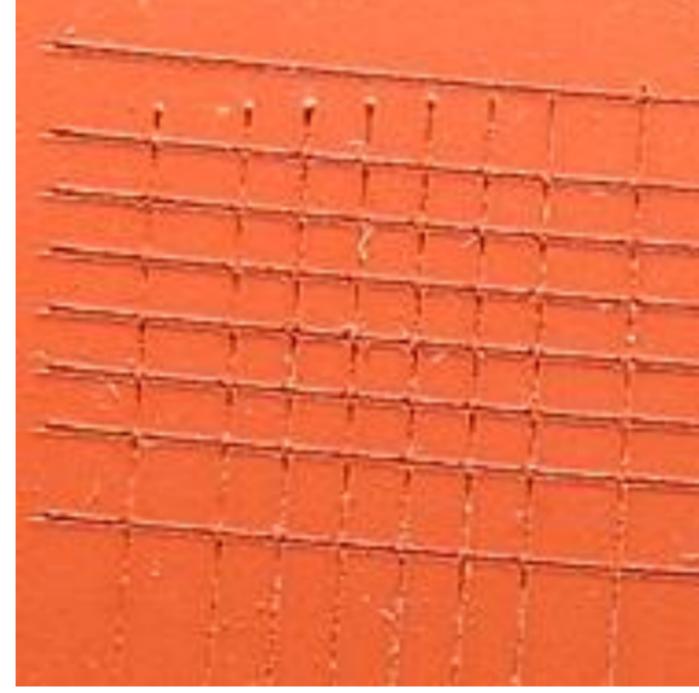
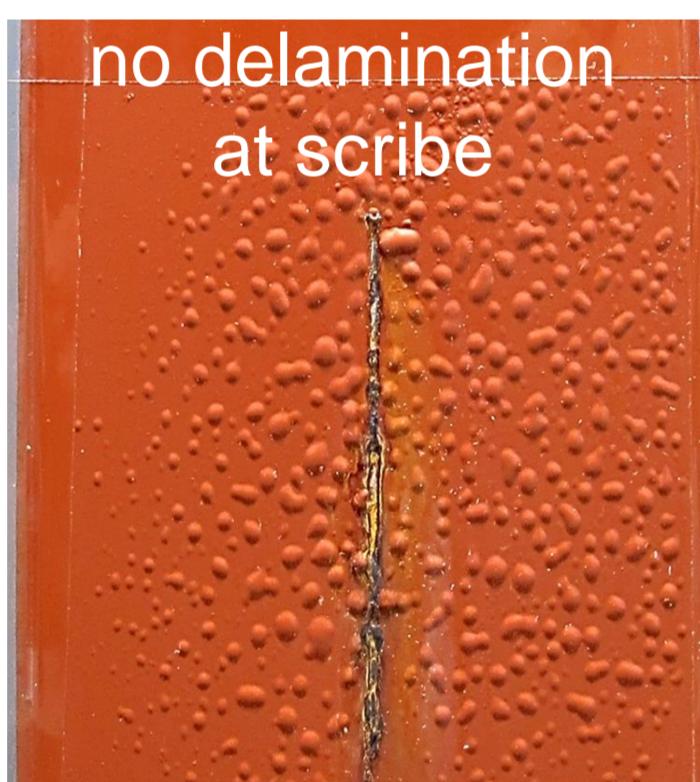
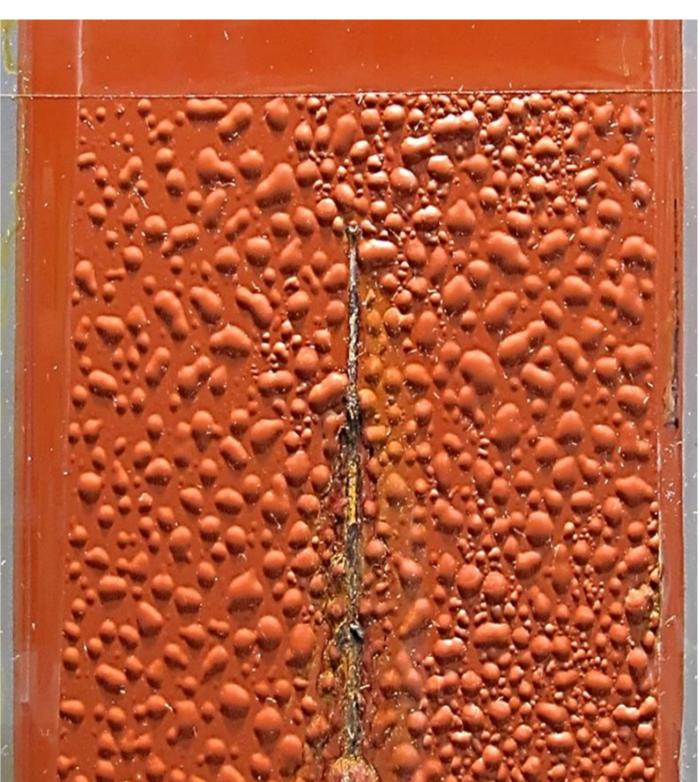
Preparation: dissolver with toothed disc

Basis: Guide formulation FP 48-02 by Alberdingk Boley

Neuburg Siliceous Earth in water-based corrosion protection acrylate primer, red



Results

Cold rolled steel Q-Panel R 48		Total dry film thickness 150 µm as dual-layer			Drying 28 d 23°C / 50% RH
	Calcium Carbonate + Talc				Aktifit PF 115
Adhesion	GT 0			GT 0	
Cross-cut before test					
Humidity test	 480 h GT 3 (1 h)	 480 h blistering already after 240 h	 stripped	 480 h GT 0 (1 h)	 480 h blister-free
	 480 h GT 4 - 5 (1 h)	 800 h blistering already after 480 h	 480 h GT 0 (1 h)	 800 h blister-free	
Salt spray test	 no delamination at scribe 240 h	 480 h	 no delamination at scribe 240 h	 480 h	
	Dry film thickness 80 µm as single-layer				
	 120 h	 120 h	 240 h	 240 h	

Summary

Retained features

- Excellent adhesion before corrosion tests
- No delamination effects at scribe

Improved features

- Better wet-adhesion under humid / ionic environmental exposure
 - Doubled blistering resistance in non-scribed areas
 - Highly counteracting lateral blistering / corrosion progress at scribe
- Aktifit PF 115** for better protective performance with only a single filler:
- ✓ Cuts off thickness or number of layers
 - ✓ Even for economic but much more critical single coat application