



INTRODUCING A NOVEL **A**NTI **C**ORROSIVE **E**CO FRIENDLY TECHNOLOGY



INTRODUCTION

- In the world of corrosion inhibitors, SNCZ is setting up a new landmark with the patented ACE technology.
- New high performance **EcoFriendly AntiCorrosive** pigments.
- Non Ecotoxic Zinc phosphate, modified Zinc phosphate and polyphosphates.

NEW ECO-FRIENDLY CORROSION INHIBITORS

Standard range



Standard Zinc Phosphate



Zinc Phosphate PZ20

ACE Technology



Eco-Friendly Range



Novinox ACE20
Eco-Friendly Zinc Phosphate

Modified Zinc Phosphate



Phosphinal PZ04
Zinc Aluminium Phosphate

ACE Technology



Novinox ACE 24
Eco-Friendly Zinc Aluminium Phosphate

Modified Zinc Phosphate



Novinox PPS10
Zinc Phosphosilicate

ACE Technology



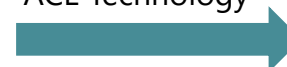
Novinox ACE36W
Eco-Friendly Zinc Phosphosilicate

Modified Polyphosphate



Novinox PAZ
Zinc Aluminium Polyphosphate

ACE Technology



Novinox ePAZ
Eco-Friendly Zinc Aluminium polyphosphate



NOVINOX ACE 20



Ecotoxicity tests

	Novinox ACE 20	Zinc Phosphate PZ20
Algae <i>Growth inhibition rate 72h</i> <i>If growth rate inhibition is less than 50 %, then material is non Ecotoxic on Algae</i>	11.67 % EC50 > 100mg/L	16.25 %
Daphnia <i>Immobilization ratio 48h</i> <i>If immobilization ratio is less than 10 (/20), then material is non Ecotoxic for Daphnia</i>	0 EC50 > 100mg/L	0
Fish <i>Mortality 96h</i> <i>If immobilization ratio is less than 4 (/8), then material is non Ecotoxic for Fish</i>	0 EC50 > 100mg/L	5
Daphnia <i>21 days breeding tests</i>	NOEC > 1mg/L	-

Following acute ecotoxicity and chronic ecotoxicity tests, **Novinox ACE20** is not classified as toxic for the aquatic life.

NOVINOX ACE 20

	Novinox ACE20	Zinc Phosphate PZ20
Classification	No labelling	H410 R50/53  Warning
Transportation	No labelling	 UN 3077 
Storage	No limitation	Subject to restrictions (e.g. SEVESO 2 if >200 tons in Europe)

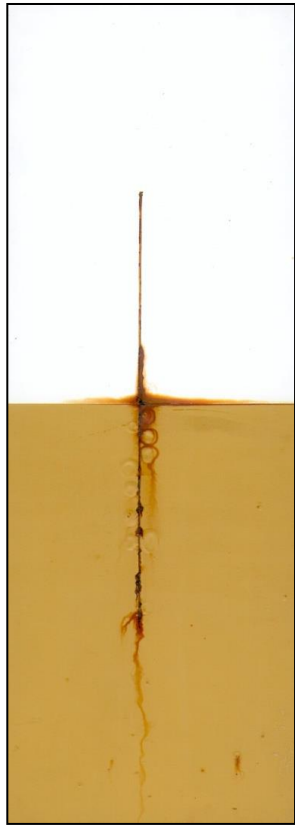
NOVINOX ACE 20

NOVINOX ACE20 VS. ZINC PHOSPHATE PZ20 ANTICORROSION PERFORMANCE IN VARIOUS SYSTEMS

- Epoxy amide primer, SB
- Epoxy amine primer, SB
- PE-Melamine primer, SB
- Styrene acrylic primer, WB
- Styrene acrylic one coat, WB
- Alkyd Emulsion primer, WB

NOVINOX ACE 20

EPOXY AMIDE SB PRIMER



Novinox ACE20

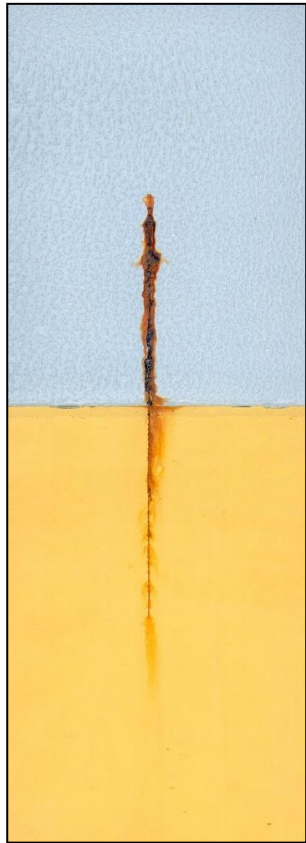


Zinc Phosphate
PZ20

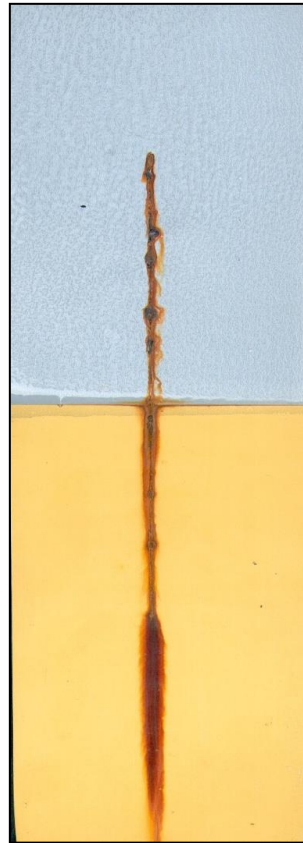
- Application over CRS using a spray gun
- Epoxy amide primer 50 μm + PU topcoat 100 μm
- Salt spray exposure 600 h
- PVC : 34.73%
- ESV : 44.84%
- Pigment/Binder vol : 0.53
- Anticorrosive pigment load : 8%

NOVINOX ACE 20

EPOXY AMINE SB PRIMER



Novinox ACE20



Zinc Phosphate
PZ20

- Application over CRS using a spray gun
- Epoxy amide primer 50 μm + PU topcoat 100 μm
- Salt spray exposure 600 h
- PVC : 39.51%
- ESV : 39.56%
- Pigment/Binder vol : 0.65
- Anticorrosive pigment load : 8%

NOVINOX ACE 20

PE-MELAMINE PRIMER



Novinox ACE20



**Zinc Phosphate
PZ20**

- PE-Melamine primer 7 μm
+ PE topcoat 20 μm
- Salt spray exposure 500h
- HDG with surface treatment 4504
- Anticorrosive pigment load: 7%

	Plan surface	Scribe clemens (mm)	Scribe Cut (mm)	Edges (mm)	Anticorrosive efficiency (50-total d)
ACE20	0	3.25	3	3.5	40.25
PZ20	0	3.5	3.25	3.75	39.5

NOVINOX ACE 20

STYRENE ACRYLIC WB PRIMER



Novinox ACE20

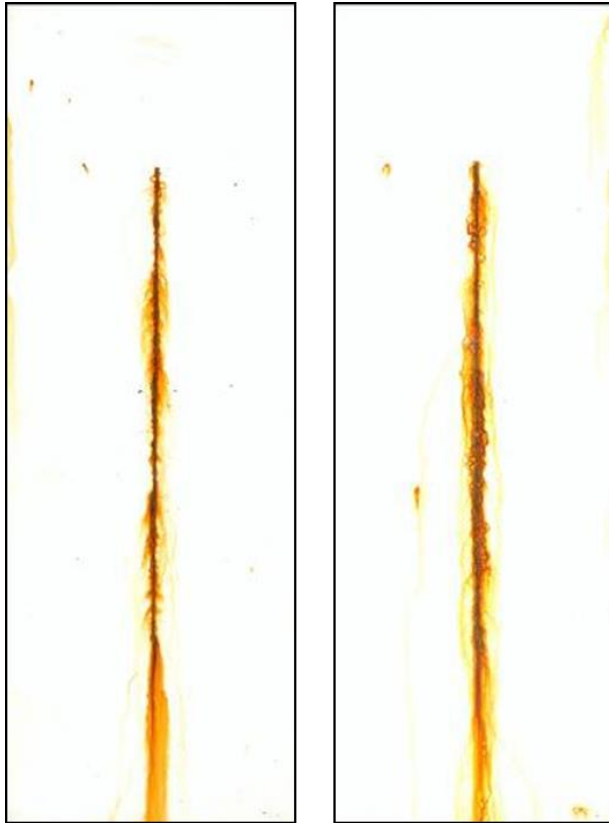


**Zinc Phosphate
PZ20**

- Application over CRS using a spray gun
- Styrene acrylic primer 60 μm + Styrene acrylic topcoat 70 μm
- Salt spray exposure 300 h
- VOC < 100 g/l
- PVC : 25.08%
- Solids : 58.87%
- Volumic solids : 46.25%
- Pigment / Binder ratio : 0.33
- Anticorrosive pigment load : 10.5%

NOVINOX ACE 20

STYRENE ACRYLIC WB - ONE COAT PRIMER



Novinox ACE20

Zinc Phosphate
PZ20

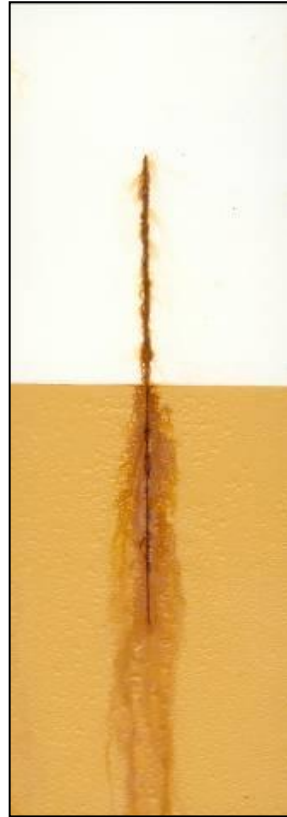
- Application over CRS using a spray gun
- Styrene acrylic primer 60 µm
- Salt spray exposure 300 h
- VOC < 100 g/l
- PVC : 22.96%
- Solids : 59.38%
- Volumic solids : 46.31%
- Pigment / Binder ratio : 0.30
- Anticorrosive pigment load : 10.5%

NOVINOX ACE 20

ALKYD EMULSION WB PRIMER



Novinox ACE20



Zinc Phosphate
PZ20

- Application over CRS using a spray gun
- Alkyd emulsion primer 65 μm + Alkyd emulsion topcoat 30 μm
- Salt spray exposure 250 h
- VOC < 100 g/l
- PVC : 22.96%
- Solids : 59.38%
- Volumic solids : 46.31%
- Pigment / Binder ratio : 0.30
- Anticorrosive pigment load : 10.5%

NOVINOX ACE 20

- A new high performance EcoFriendly Anticorrosive Inhibitor
- Technical Performance similar to PZ20
- Contains no free ZnO
- Not classified as water pollutant or dangerous for the environment
- Not classified for transportation or storage



NOVINOX ACE 24



Ecotoxicity tests

	Novinox ACE 24	Classification according to Regulation 1272/2008/EC [CLP]	GHS revision 5 - 2013
Algae <i>Growth inhibition rate 72h</i>	EC50 > 10mg/L	Acute category 3 => Not classified according to CLP	Acute category 3 H402 : 'Harmful effects to aquatic life'
Daphnia <i>Immobilization ratio 48h</i>	EC50 > 100mg/L		
Fish <i>Mortality 96h</i>	EC50 > 100mg/L		
Daphnia <i>21 days breeding tests</i>	NOEC > 1mg/L	Aquatic chronic category 4 H413	None
Final classification		H413 May cause long-lasting harmful effects to aquatic life	H402 Harmful to aquatic life

Paints containing less than 25% of Novinox ACE 24 are not classified – *providing no other ingredient contribute to the paint classification.*

NOVINOX ACE 24

	Novinox ACE 24 [CLP]	Novinox ACE 24 [GHS]	Phosphinal PZ04
Classification	No labelling H413	No labelling H402	H410 R50/53  Warning
Transportation	No labelling	No labelling	 UN 3077 
Storage	No limitation	No limitation	Subject to restrictions (e.g. SEVESO 2 if >200 tons in Europe)

NOVINOX ACE 24

NOVINOX ACE 24 VS. PHOSPHINAL PZ04 ANTICORROSION PERFORMANCE IN VARIOUS SYSTEMS

- Epoxy amine primer, SB
- Styrene acrylic primer, WB
- Alkyd emulsion, WB

NOVINOX ACE 24

EPOXY AMINE SB PRIMER



Novinox ACE 24



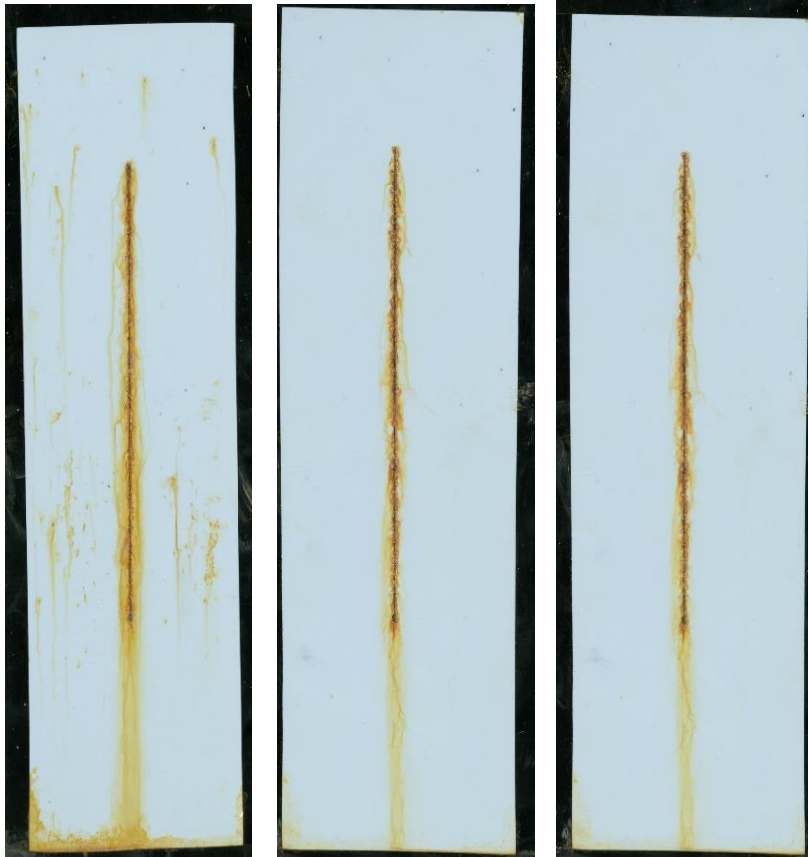
Phosphinal PZ04

- Application over cold rolled steel using a spray gun
- Epoxy amine primer 50 μm
- Salt spray exposure 500 h
- PVC : 37.2%
- Solid content by vol : 53.75%
- Pigment/Binder vol : 0.6
- Anticorrosive pigment load : 8 %

	Rust index	Blister index	Corrosion at the scribe	Corrosion on the surface	Total (/40) Anticorrosion efficiency
Novinox ACE 24	RI1 (8)	D0S0 (10)	3	7	28
Phosphinal PZ04	RI2 (6)	D0S0 (10)	3	6	25

NOVINOX ACE 24

STYRENE ACRYLIC WB PRIMER



PZ20

PZ04

ACE 24

- Application over cold rolled steel using a spray gun
- Styrene acrylic primer 70 μm (Maincote PR1071 - DOW)
- Salt spray exposure 250 h
- VOC < 100 g/l
- PVC : 25.08%
- Solids : 58.87%
- Volumic solids : 46.25%
- Pigment / Binder ratio : 0.33
- Anticorrosive pigment load : 10.5%

NOVINOX ACE 24

STYRENE ACRYLIC WB PRIMER

	Rust index NF-ISO 4828-3 T 30140-3	Blister index NF-ISO 4828-3 T 30140-3	Corrosion at the scribe ASTM 1654	Corrosion on the surface ASTM 1654	Total (out of 40) Anticorrosion efficiency
Novinox ACE 24	RI1 (9)	D0S0 (10)	6	8	33
Phosphinal PZ04	RI1 (9)	D2S3 (7)	5	5	26
Zinc Phosphate PZ20	RI3 (4)	D5S3 (7)	3	4	18

Novinox ACE 24 and Phosphinal PZ04 offer the similar level of anticorrosion performance.

The storage stability was also tested and proved to be good after 5 months at room temperature.

NOVINOX ACE 24

STYRENE ACRYLIC WB PRIMER



PZ20

PZ04

ACE 24

- Application over cold rolled steel using a spray gun
- Styrene acrylic primer 70 μm (Acronal PRO 761 – BASF)
- Salt spray exposure 265 h
- PVC : 22.02%
- Volumic solid content : 47.66%
- Pigment / Binder ratio : 0.28
- Anticorrosive pigment load : 8.8%

NOVINOX ACE 24

STYRENE ACRYLIC WB PRIMER

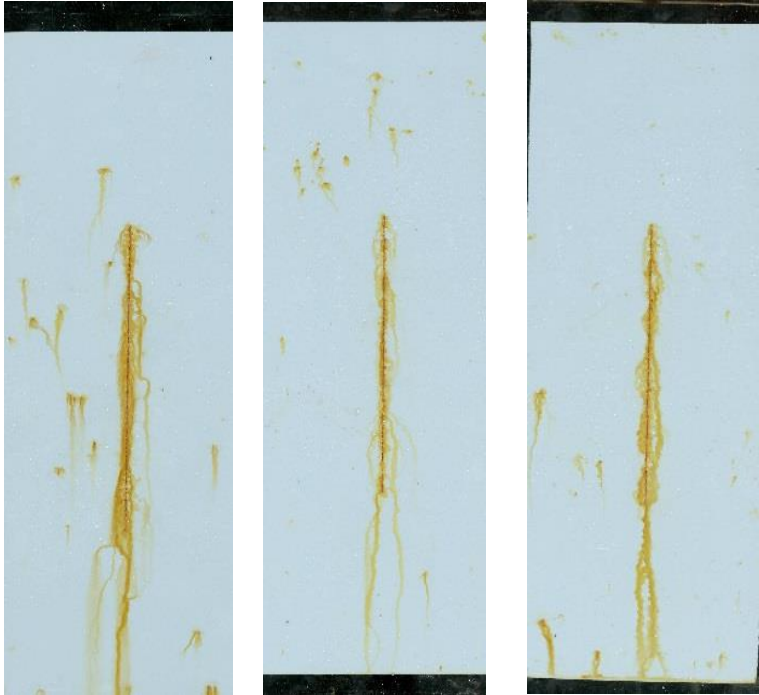
	Rust index NF-ISO 4828-3 T 30140-3	Blister index NF-ISO 4828-3 T 30140-3	Corrosion at the scribe ASTM 1654	Corrosion on the surface ASTM 1654	Total (out of 40) Anticorrosion efficiency
Novinox ACE 24	RI1 (8)	D4S2 (2)	3	5	18
Phosphinal PZ04	RI2 (6)	D4S2 (2)	3	4	15
Zinc phosphate PZ20	RI3 (4)	D4S3 (2)	2	3	11

Novinox ACE 24 and Phosphinal PZ04 offer a similar corrosion resistance level.

The formulation proves to be stable after 1 month at room temperature.

NOVINOX ACE 24

ALKYD EMULSION WB PRIMER



PZ20

PZ04

ACE 24

- Application over cold rolled steel using a spray gun
- Alkyd emulsion 50 μm (WORLEE W330)
- Salt spray exposure 200 h
- PVC : 23.69%
- Volumic solid content : 34.66%
- Pigment / Binder ratio : 0.3
- Anticorrosive pigment load : 9.0%

NOVINOX ACE 24

ALKYD EMULSION WB PRIMER

	Rust index NF-ISO 4828-3 T 30140-3	Blister index NF-ISO 4828-3 T 30140-3	Corrosion at the scribe ASTM 1654	Corrosion on the surface ASTM 1654	Total (out of 40) Anticorrosion efficiency
Novinox ACE 24	RI2 (6)	D0S0 (10)	4	4	24
Phosphinal PZ04	RI2 (6)	D0S0 (10)	5	5	26
Zinc phosphate PZ20	RI4 (2)	D0S0 (10)	4	3	19

Novinox ACE 24 and Phosphinal PZ04 offer a similar corrosion resistance level.

The formulation proves to be stable after 1 month at room temperature.

NOVINOX ACE 24

- A new high performance EcoFriendly Anticorrosive Inhibitor
- Technical performance similar to Phosphinal PZ04, with a higher corrosion resistance than a standard Zinc Phosphate.
- No classification for transportation and storage



NOVINOX ACE 36W



Ecotoxicity tests

	Novinox ACE 36W	Classification according to Regulation 1272/2008/EC [CLP]
Algae Growth inhibition rate 72h	EC50 > 100mg/L	No acute ecotoxicity
Daphnia Immobilization ratio 48h	EC50 > 100mg/L	
Fish Mortality 96h	EC50 > 100mg/L	
Daphnia 21 days breeding tests	NOEC > 1mg/L	No chronic ecotoxicity

Toxicity tests (GLP) have been performed by SGS Multilab (France)

Novinox ACE 36W is not toxic for the aquatic life.

NOVINOX ACE 36W

	Novinox ACE 36W	Novinox PPS10 (and other Zinc Phosphosilicate)
Classification	No labelling	H410 R50/53  Warning
Transportation	No labelling	 UN 3077 
Storage	No limitation	Subject to restrictions (e.g. SEVESO 2 if >200 tons in Europe)

NOVINOX ACE 36W

NOVINOX ACE 36W VS. COMPETITOR ZINC PHOSPHOSILICATE ANTICORROSION PERFORMANCE IN VARIOUS SYSTEMS

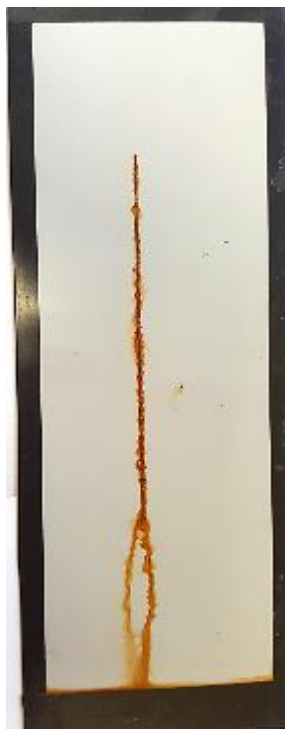
- Alkyd Emulsion primer, WB
- Styrene acrylic primer, WB
- 2K Epoxy, WB
- 2K Epoxy, SB

ALKYD EMULSION

200H SALT SPRAY ON CRS – DFT = 60 μm – 1 LAYER
9% CORROSION INHIBITOR



Zinc Phosphate
PZ20



Novinox ACE 36W



Competitor Zinc
Phosphosilicate

ALKYD EMULSION

200H SALT SPRAY TEST ON CRS – DFT = 60 µm – 1 LAYER
9% ANTICORROSIVE PIGMENT

	Rust index NF-ISO 4828-3 T 30140-3	Blister index NF-ISO 4828-3 T 30140-3	Corrosion at the scribe ASTM 1654	Surface ASTM 1654	Total (out of 40) Anticorrosion efficiency
Zinc Phosphate PZ20	RI3 (4)	D5S2 (1)	6	0	11
Novinox ACE 36W	RI1 (8)	D2S2 (9)	7	8	32
Competitor Zinc Phosphosilicate	RI3 (4)	D3S3 (6)	7	4	21

Rating : 10 is best, 0 is poor

- ⇒ NOVINOX ACE 36W gives the highest performance in alkyd emulsion with the best corrosion resistance.
- ⇒ No issue in the storage stability was noticed after 3 months at room temperature

WB STYRENE ACRYLIC SYSTEM

250H SALT SPRAY TEST ON CRS – DFT = 100 μm – 1 LAYER

10% ANTICORROSIVE PIGMENT



ZINC PHOSPHATE
PZ20



NOVINOX ACE 36W



PHOSPHINAL PZ04



Competitor Zinc
phosphosilicate

WB STYRENE ACRYLIC SYSTEM

250H SALT SPRAY TEST ON CRS – DFT = 100 μm – 1 LAYER

10% ANTICORROSIVE PIGMENT

	Rust index NF-ISO 4828-3 T 30140-3	Blister index NF-ISO 4828-3 T 30140-3	Corrosion at the scribe ASTM 1654	Surface ASTM 1654	Total (out of 40) Anticorrosion efficiency
Zinc Phosphate PZ20	RI1 (8)	D2S2 (9)	5	6	28
Novinox ACE 36W	RI0 (10)	D0S0 (10)	5	8	33
Phosphinal PZ04	RI0 (10)	D2S2 (9)	6	8	33
Competitor Zinc Phosphosilicate	RI1 (8)	D3S3 (6)	5	6	25

Rating 10 is best, 0 is poor

- ⇒ NOVINOX ACE 36W gives high corrosion resistance in WB styrene acrylic system, similar to Phosphinal PZ04.
- ⇒ There was no issue with the storage stability after 2 months at room temperature.

WB 2K EPOXY SYSTEM

1000H SALT SPRAY TEST ON CRS – DFT = 110 µm – 1 LAYER

6.5% ANTICORROSIVE PIGMENT



NOVINOX ACE 36W



Competitor Zinc phosphosilicate

	Rust index NF-ISO 4828-3 T 30140-3	Blister index NF-ISO 4828-3 T 30140-3	Corrosion at the scribe ASTM 1654	Surface ASTM 1654	Total (/40) Anticorrosion efficiency
Novinox ACE 36W	RI2 (6)	D3S4 (4)	6	8	24
Competitor Zinc Phosphosilicate	RI2 (6)	D2S4 (5)	7	7	25

Rating 10 is best, 0 is poor

⇒ NOVINOX ACE 36W gives similar corrosion resistance to competition

SB – 2K EPOXY SYSTEM

850H SALT SPRAY TEST ON CRS – DFT = 65 μm – PRIMER ONLY

ANTICORROSIVE PIGMENT LOADING : 8.5%



ZINC PHOSPHATE
PZ20



NOVINOX ACE 36W



Competitor Zinc
phosphosilicate

SB – 2K EPOXY SYSTEM

850H SALT SPRAY TEST ON CRS – DFT = 65 μm – PRIMER ONLY
ANTICORROSIVE PIGMENT LOADING : 8.5% - PAINT STRIPPED



ZINC PHOSPHATE
PZ20



NOVINOX ACE 36W



Competitor Zinc
phosphosilicate

SB – 2K EPOXY SYSTEM

850H SALT SPRAY TEST ON CRS – DFT = 65 µm – PRIMER ONLY

ANTICORROSIVE PIGMENT LOADING : 8.5%

		Rust index NF-ISO 4828-3 T 30140-3	Blister index NF-ISO 4828-3 T 30140-3	Corrosion at the scribe ASTM 1654	Corrosion on the surface ASTM 1654	Total (out of 40) Anticorrosion efficiency
Coated panel	Zinc Phosphate PZ20	RI1 (8)	D2S2 (9)	6	7	30
	Novinox ACE 36W	RI1 (8)	D2S2 (9)	5	8	30
	Competitor Zinc Phosphosilicate	RI1 (8)	D2S2 (9)	6	7	30
Stripped panel	Zinc Phosphate PZ20	RI2 (6)	-	4	6	16
	Novinox ACE 36W	RI1 (8)	-	4	8	20
	Competitor Zinc Phosphosilicate	RI3 (4)	-	5	6	15

Rating : 10 is best, 0 is poor

⇒ NOVINOX ACE 36W gives high corrosion resistance in the SB 2K epoxy

NOVINOX ACE 36W

Novinox ACE 36W

- is our latest eco-friendly Zinc phosphosilicate.
- It is a top performer anticorrosive pigment in waterborne systems.
- It is also efficient with solventborne systems

Novinox ACE 36W offers:

- High anticorrosion performance
- No safety labels/ no classification
- No restriction on transportation / No limitation on storage



NOVINOX EPAZ



NOVINOX ePAZ

THE ECO-FRIENDLY ZINC ALUMINIUM POLYPHOSPHATE

	Novinox ePAZ	Classification according to Regulation 1272/2008/EC [CLP]	Classification according to GHS revision 5 - 2013
Algae Growth inhibition rate 72h	EC50>10mg/L	Acute category 3 Not classified according to CLP	Acute category 3 Hazard statement H402
Daphnia Immobilization ratio 48h	EC50>100mg/L		
Fish Mortality 96h	EC50>100mg/L		
Daphnia 21 days breeding tests	NOEC<1mg/L	Chronic 3 Hazard Statement: H412	Chronic 3 Hazard Statement: H412

According to CLP, Novinox ePAZ is classified H412.

According to GHS, Novinox ePAZ is classified H402/H412.

Paints containing less than 25% of Novinox ePAZ are not classified – providing there is no other ingredient contributing to the classification of the paint.

NOVINOX EPAZ

	Novinox ePAZ	Novinox PAZ
Classification	No labelling	H410 R50/53  Warning
Transportation	No labelling	 UN 3077 
Storage	No limitation	Subject to restrictions (e.g. SEVESO 2 if >200 tons in Europe)

NOVINOX EPAZ

THE ECO-FRIENDLY ZINC ALUMINIUM POLYPHOSPHATE*

- NOVINOX ePAZ is Eco-friendly and highly efficient.
- NOVINOX ePAZ gives a high anticorrosion performance in :
 - ⇒ Solventborne **PE Melamine Coil Coatings**
 - ⇒ Solventborne **Epoxy 2K**
 - ⇒ Waterborne **Acrylics** and Modified Acrylics
 - ⇒ Waterborne **Alkyds Emulsion**

* Patented ACE technology from SNCZ

NOVINOX EPAZ

PE-MELAMINE : 500H SST ON HDG WITH A CHROME FREE SURFACE TREATMENT (COIL COATING FORMULATION)

- Steel substrate: HDG
- Chrome free surface treatment: Gardobond X4744
- Primer: PE/Melamine 7µm with
7% corrosion inhibitor
0.5% Catalyst – Nacure 2500
- Top Coat: PE Melamine 20 µm (PMT : 232-241°C)
- Scribes:
Right: Clemens, 25 psi (down to the steel substrate)
Left : Cut, 5 psi (down to zinc alloy layer)
- Salt spray: 500 hours acc. to ASTM B 117

NOVINOX EPAZ

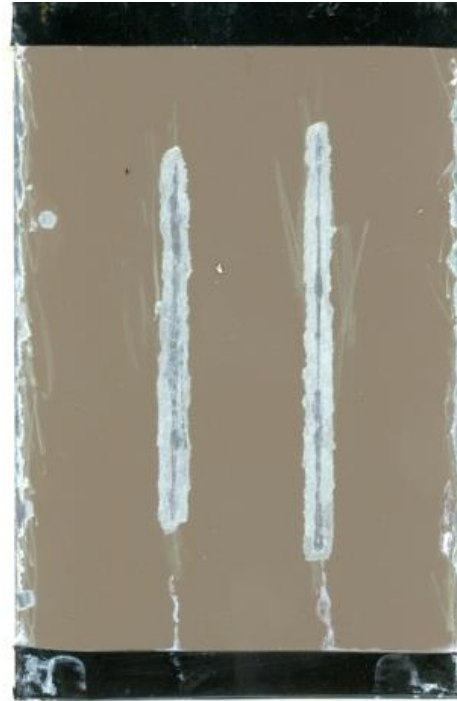
**PE-MELAMINE : 500H SST ON HDG WITH A CHROME FREE SURFACE TREATMENT
(COIL COATING FORMULATION)**



**Strontium chromate
L203E**



NOVINOX ePAZ



NOVINOX PAZ
*Standard Zinc Aluminium
Polyphosphate*



**Competitor
Polyphosphate**

NOVINOX EPAZ

PE-MELAMINE : 500H SST ON HDG WITH A CHROME FREE SURFACE TREATMENT (COIL COATING FORMULATION)

	Surface mm ² *	Scribe clemens mm ² *	Scribe Cut mm ² *	Edges mm ² *	Anticorrosive efficiency % **
Strontium chromate L203E	0	88	114	442	93.7
Novinox ePAZ	2	438	362	417	88.0
Novinox PAZ	9	417	383	496	87.1
Competitor Polyphosphate	2	410	361	505	87.3

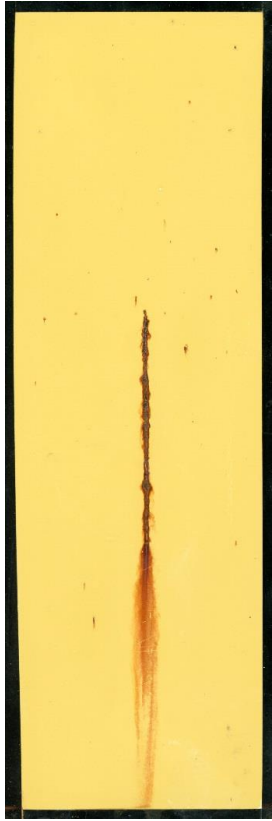
Novinox ePAZ gives a high anticorrosion performance in coil coatings, close to Strontium chromate performance.

* Damaged surface

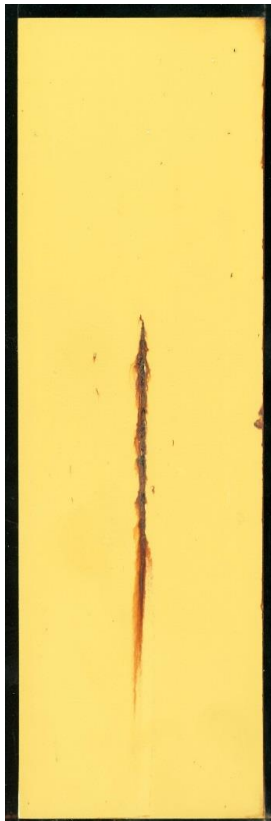
** Ratio : total undamaged surface to total surface of the panel

NOVINOX EPAZ

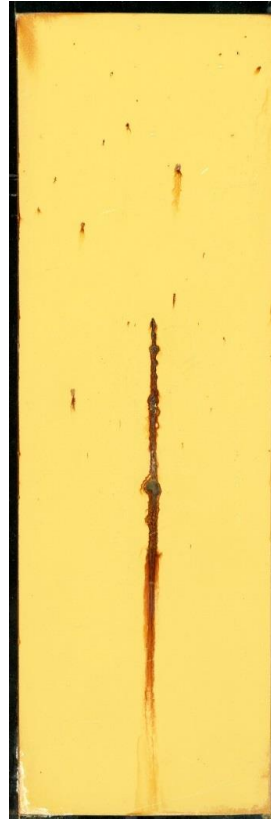
2K EPOXY SB PRIMER



NOVINOX PAZ
Standard Zinc Aluminium
Polyphosphate



NOVINOX ePAZ



**Competitor
Polyphosphate**

- Salt spray exposure 500h on Cold Rolled Steel
- DFT = 50 μm
- Anticorrosive pigment load: 8.5%

NOVINOX EPAZ

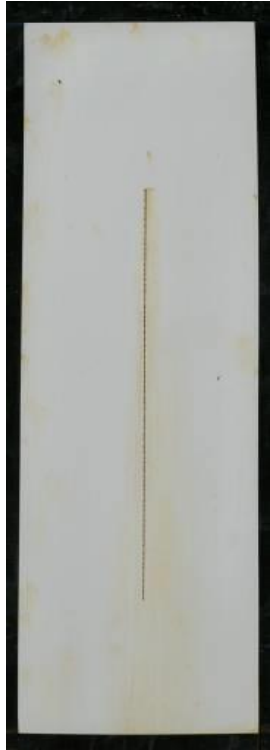
2K EPOXY SB PRIMER

	Rust index NF-ISO 4828-3 T 30140-3	Blister index NF-ISO 4828-3 T 30140-3	Corrosion at the scribe ASTM 1654	Corrosion on the surface ASTM 1654	Total (out of 40) Anticorrosion efficiency
Novinox ePAZ	RI1 (8)	D0S0 (10)	5	8	31
Novinox PAZ	RI1 (8)	D0S0 (10)	5	7	30
Competitor Polyphosphate	RI2 (6)	D0S0 (10)	4	6	26

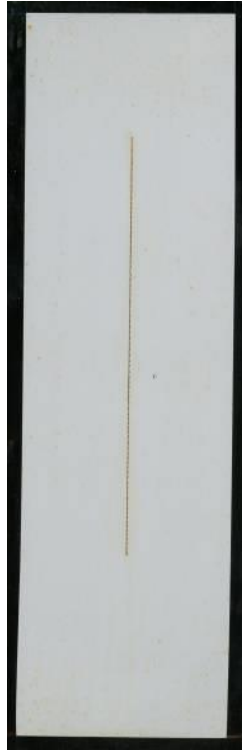
Novinox ePAZ shows the highest performance in SB 2K Epoxy with less corrosion at the scribe and fewer corrosion pits on the surface.

NOVINOX EPAZ

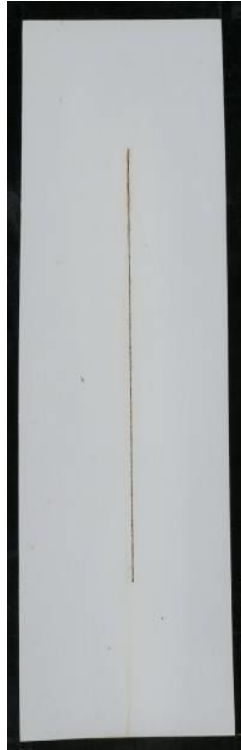
STYRENE ACRYLIC WB PRIMER



Zinc Phosphate
PZ20



NOVINOX PAZ
Standard Zinc Aluminium
Polyphosphate



NOVINOX ePAZ



Competitor
Polyphosphate

- Salt spray exposure 200h on Cold Rolled Steel
- DFT = 50 μm
- Anticorrosive pigment load: 10%

NOVINOX ePAZ

STYRENE ACRYLIC WB PRIMER

	Rust index NF-ISO 4828-3 T 30140-3	Blister index NF-ISO 4828-3 T 30140-3	Corrosion at the scribe ASTM 1654	Surface ASTM 1654	Total (out of 40) Anticorrosion efficiency
Zinc phosphate PZ20	RI1 (8)	D2S2 (9)	8	9	34
NOVINOX PAZ	RI1 (8)	D0S0 (10)	9	9	36
NOVINOX ePAZ	RI0 (10)	D0S0 (10)	9	9	38
Competitor Polyphosphate	RI2 (6)	D2S4 (5)	6	6	23

NOVINOX ePAZ gives the highest performance in WB styrene acrylics with the best corrosion resistance at the scribe and the best resistance to blistering.

NOVINOX ePAZ

ALKYD EMULSION WB PRIMER



Zinc Phosphate
PZ20



NOVINOX PAZ
*Standard Zinc Aluminium
Polyphosphate*



NOVINOX ePAZ



Competitor
Polyphosphate

- Salt spray exposure 200 h on Cold Rolled Steel
- DFT = 50 μm
- Anticorrosive pigment load: 9%

NOVINOX EPAZ

STYRENE ACRYLIC WB PRIMER

	Rust index NF-ISO 4828-3 T 30140-3	Blister index NF-ISO 4828-3 T 30140-3	Corrosion at the scribe ASTM 1654	Surface ASTM 1654	Total (out of 40) Anticorrosion efficiency
Zinc phosphate PZ20	RI2 (6)	D5S2 (1)	3	1	11
NOVINOX PAZ	RI1 (8)	D2S2 (9)	8	6	31
NOVINOX ePAZ	RI1 (8)	D2S2 (9)	8	7	32
Competitor Polyphosphate	RI1 (8)	D2S3 (7)	7	6	28

Novinox PAZ and Novinox ePAZ give the highest performance in WB alkyd emulsion with the best corrosion resistance at the scribe and the best resistance to blistering.

CONCLUSION

ACE TECHNOLOGY

- SNCZ has successfully developed 4 high-performance ecofriendly anticorrosive pigments based on its ACE technology :

Novinox ACE20 – Novinox ACE 24 – Novinox ACE 36W – Novinox ePAZ

- Our detoxification process has worked on various chemistry : Zinc Phosphate, Modified Zinc Phosphates and Polyphosphates
- Based on this technology, we propose to co-develop with AkzoNobel a tailor-made ecofriendly Zinc based pigment, fully adapted to your formulation characteristics. Alternatively, we could also apply this detoxification process to Zinc based pigments selected by AkzoNobel.