

- ✦ NON-TOXIC AND ENVIRONMENT FRIENDLY
- ✦ 30 YEARS EXPERIENCE IN R&D AND PRODUCTION
- ✦ ANNUAL CAPACITY 10,000 MT



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Guangxi Xinjing Science & Technology Co., Ltd.



ALUMINIUM

TRIPOL YPHOSPHATE SERIES

ZINC PHOSPHATE SERIES



ANTICORROSIVE PIGMENTS

COMPANY PROFILE



GUANGXI XINJING SCIENCE & TECHNOLOGY CO., LTD.

IS A LEADING MANUFACTURER OF ALUMINIUM TRIPOLYPHOSPHATE (ATP) AND ZINC PHOSPHATE (ZP) PRODUCTS IN CHINA. WITH EXPERIENCE OF 30 YEARS IN THE FIELD OF NON-TOXIC ANTICORROSIVE PIGMENTS, WE NOW HAVE DEVELOPED MORE THAN 30 TYPES OF ATP AND ZP PRODUCTS USED IN BOTH SOLVENT BASED AND WATERBORNE SYSTEMS. THE ANNUAL CAPACITY OF THE TWO PRODUCT LINES EXCEEDS 10,000 MT. THE HIGH AND STABLE QUALITY HAS WON US GOOD REPUTATION WORLDWIDE AND BROUGHT US BETTER COST PERFORMANCE THAN PRODUCTS FROM WORLD FAMOUS ATP AND ZP MANUFACTURERS.



ALUMINIUM TRIPOLYPHOSPHATE

■ **MAIN ANTICORROSIVE GROUP:** $\text{P}_3\text{O}_{10}^{5-}$

■ PROPERTIES

Nonvolatile white powder with ultrafine crystals, insoluble in water, density 2.0~3.0g/cm³, non-toxic, non-irritating to skin, thermal stable.

■ APPLICATIONS

Widely used in various primers and coatings. Can be used with phenol resin, alkyd resin, epoxy resin, acrylic resin etc to produce coatings with excellent anticorrosive properties.



TECHNICAL DATA OF ATP PRODUCTS

ATP-2000

Density (g/cm ³)	2.0-3.0
Oil absorption (g/100g)	—
pH	2.5-3.5
45μm sieve residue, %	≤0.3

MODIFIED ALUMINIUM TRIPOLYPHOSPHATE SERIES

APW-I

FOR SOLVENT BASED COATINGS

Density (g/cm ³)	2.0-3.0
Oil absorption (g/100g)	25-45
pH	5.5-7.0
45μm sieve residue, %	≤0.3

APW-II

FOR WATERBORNE EPOXY COATINGS

Density (g/cm ³)	2.0-3.0
Oil absorption (g/100g)	25-45
pH	6.0-7.0
45μm sieve residue, %	≤0.3

APC-1

FOR SOLVENT BASED COATINGS

Density (g/cm ³)	2.2-2.8
Oil absorption (g/100g)	35-45
pH	5.5-7.0
45μm sieve residue, %	≤0.3

Zinc Molybdate

Density (g/cm ³)	3.5-4.5
Oil absorption (g/100g)	10-25
pH	6.0-8.0
45μm sieve residue, %	≤0.3

ZPM-102

PHOSOPHOMOLYBDIC ACID
ALUMINUM ZINC

Density (g/cm ³)	2.0-3.0
Oil absorption (g/100g)	25-45
pH	5.5-7.0
45μm sieve residue, %	≤0.3

APW-211

FOR SOLVENT
BASED COATINGS

Density (g/cm ³)	2.0-3.0
Oil absorption (g/100g)	35-45
pH	6.0-8.0
45μm sieve residue, %	≤0.3

APW-5

FOR WATERBORNE COATINGS

Density (g/cm ³)	2.5-2.7
Oil absorption (g/100g)	25-35
pH	7.0-8.5
45μm sieve residue, %	≤0.3

APW-M105

ZINC FREE
FOR WATERBORNE COATINGS

Density (g/cm ³)	2.3-3.0
Oil absorption (g/100g)	30-50
pH	7.5-9.5
45μm sieve residue, %	≤0.3



RESULT OF TESTING

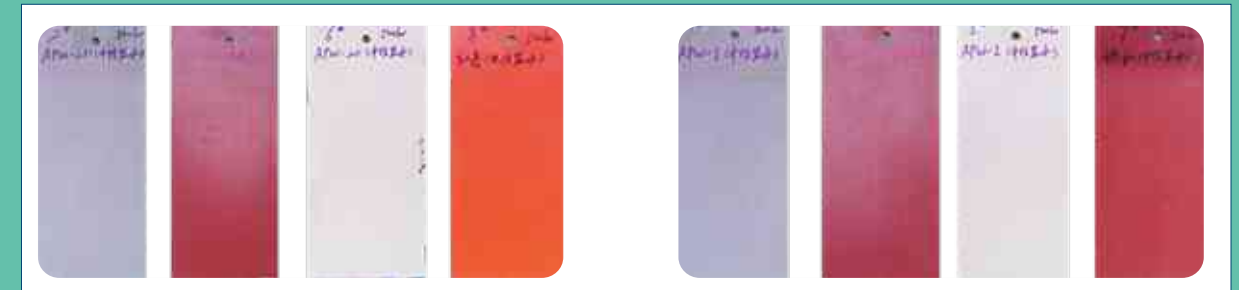


- 1 Red lead alkyd antirust paint, dipped in 3% salty water for 81 days, bad rusted. Aluminium tripolyphosphate alkyd anticorrosive paint, dipped in 3% salty water for 81 days, foamless and rustless.
- 2 Red lead anticorrosive paint, dipped in seawater for 108 days.
- 3 ATP anticorrosive paint, dipped in seawater for 108 days.
- 4

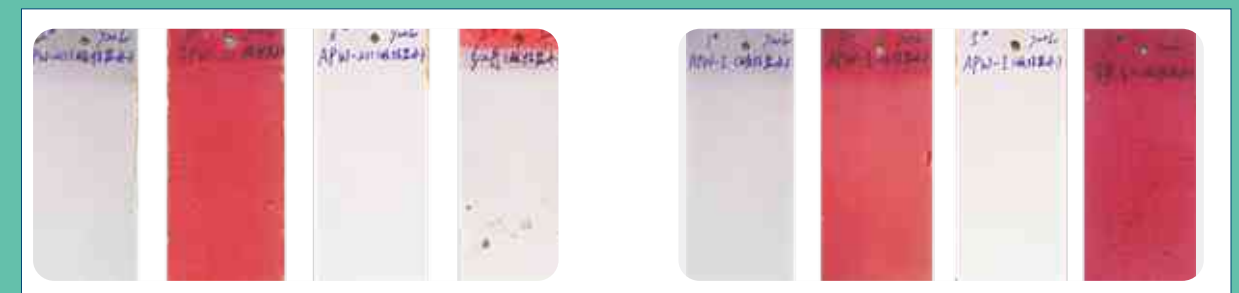
DIPPED IN 3% SALTY WATER FOR 106 DAYS:

LEFT: Red lead anticorrosive paint
RIGHT: APW-1 anticorrosive paint

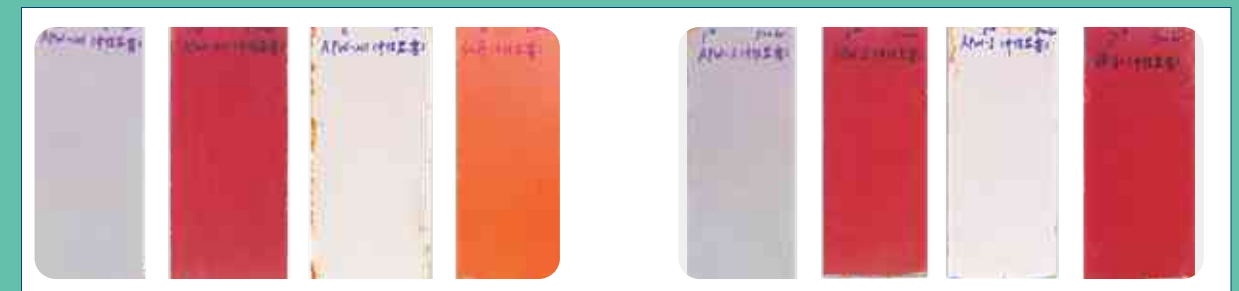
The anticorrosion comparison tests between phenolic resin anticorrosive paint using ATP and the same base anticorrosive paint using iron oxide red and red lead:



Anticorrosion comparison of primer in NaCl neutral salter(500hours, 30℃)



Anticorrosion comparison of primer in NaCl neutral salter(720hours, 30℃)



Anticorrosion comparison of primer in NaCl neutral salter(500hours, 35℃)

ZINC PHOSPHATE

■ MAIN COMPOSITION: $\text{Zn}_3(\text{PO}_4)_2 \cdot x\text{H}_2\text{O}$

■ PROPERTIES

Zinc Phosphate is a traditional non-toxic anticorrosive pigment for paints. It is in white crystal powder form with density of 2.5~3.5g/cm³, insoluble in water.



TECHNICAL DATA OF ZP PRODUCTS

ZINC PHOSPHATE

Zinc as Zn^{2+} (ignitated)	≥50.5
Density (g/cm ³)	3.0-4.0
Oil absorption (g/100g)	20-30
pH	5.0-7.0
45μm sieve residue, %	≤0.3

ZPC-1 FOR WATERBORNE ALKYD COATINGS

Zinc as Zn^{2+} (ignitated), %	≥35
Density (g/cm ³)	2.5-3.0
Oil absorption (g/100g)	25-45
pH	5.5-7.0
45μm sieve residue, %	≤0.3

ZP-X FOR WATERBORNE COATINGS

Zinc as Zn^{2+} (ignitated), %	≥35
Density (g/cm ³)	2.5-3.5
Oil absorption (g/100g)	30-45
pH	5.5-7.0
45μm sieve residue, %	≤0.3

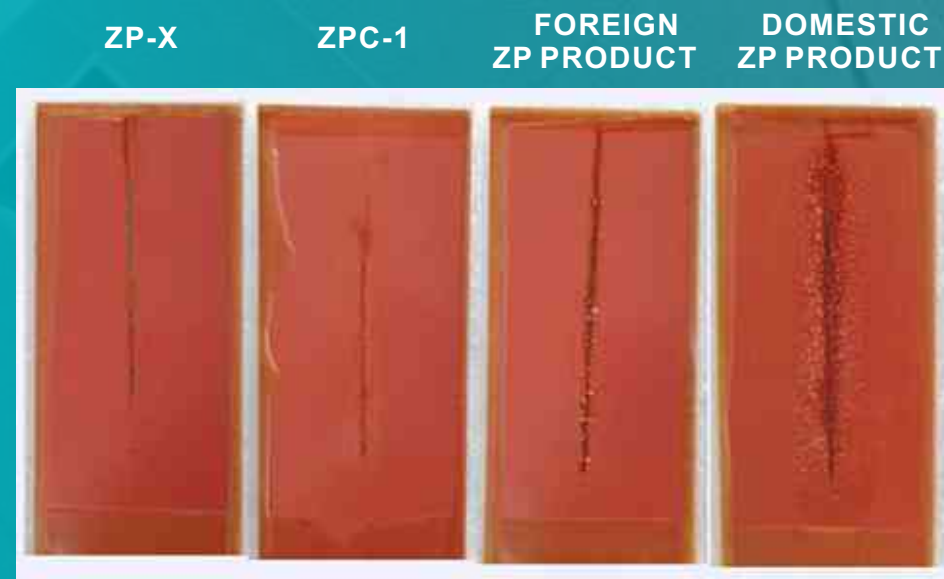
MODIFIED ZP FOR BOTH SOLVENT BASED AND WATERBORNE COATINGS

Zinc as Zn^{2+} (ignitated), %	≥25
Density (g/cm ³)	2.5-3.5
Oil absorption (g/100g)	20-30
pH	6.0-8.0
45μm sieve residue, %	≤0.3

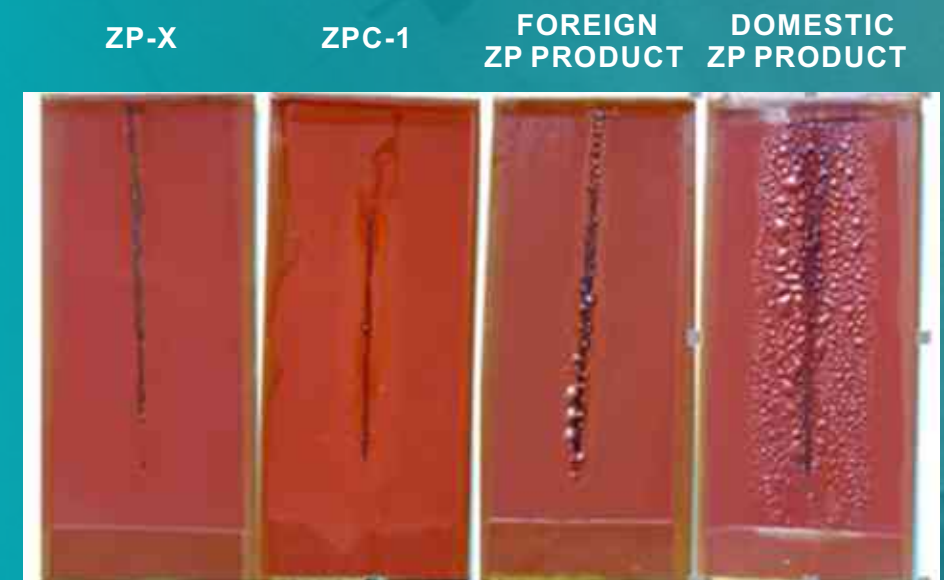
RESULT OF TESTING

WATERBORNE ALKYD COATING

NSS TEST 122 HOURS:



NSS TEST 218 HOURS:



WATERBORNE IRON RED ACRYLIC PRIMER

NSS TEST 72 HOURS:



NSS TEST 163 HOURS:



SOLVENT ALKYD PRIMER

NSS TEST 240 HOURS:

