

Intershield 4000USP

Enhanced protection, optimized cost



Anticorrosive Universal System Primer

The latest innovation in corrosion protection, Intershield 4000USP is a Universal System Primer (USP) engineered to deliver very high durability and improve productivity.

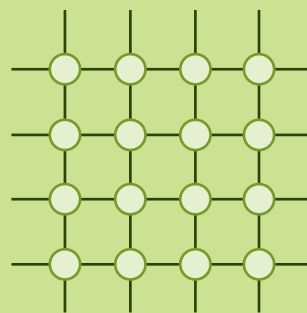
A result of years of development, Intershield 4000USP is a unique combination of a densely crosslinking resin based on Alkylated Amine Epoxy technology, and a blend of passivating pigments. High performance, combined with versatility of use, makes Intershield 4000USP a viable alternative to zinc rich primers in protecting structural steel in modular fabrication or stick built projects.

Innovative formulation equals long term protection

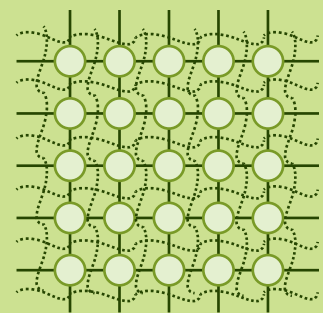
- Based on Alkylated Amine Epoxy resin technology with a unique phenalkamine curing agent promoting dense crosslinking
- High loading of inhibitive pigments inducing passivation enhancement

Increasing permeation resistance

Contributes to the barrier effect
(See below)



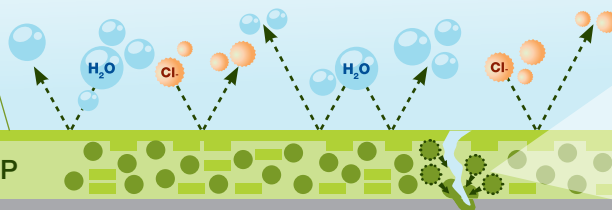
Typical epoxy resin



Densely crosslinked Alkylated Amine Epoxy resin

Barrier effect

Alkylated Amine Epoxy technology
Providing a densely crosslinked barrier



Intershield 4000USP

Steel substrate

Passivation

Blend of inhibitive pigments and novel phenalkamine resin contributing to an enhanced passivation effect

When the coating system is damaged, passivation pigments create an inert layer at the substrate, thereby inhibiting the onset of corrosion.

Intershield 4000USP

Steel substrate

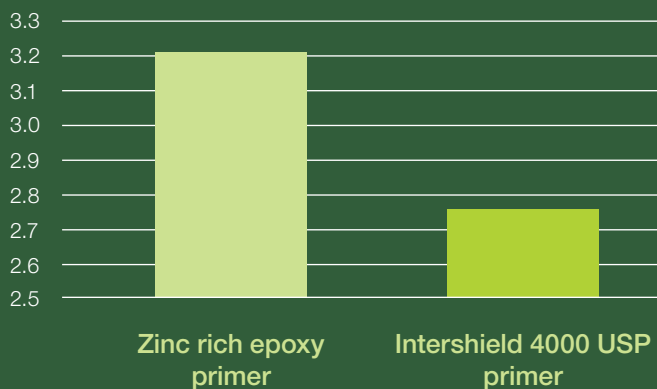
Inhibitive pigments

H₂O Cl⁻ Ions

Benefits & customer value

Typical cost for a 3 coat anticorrosive system*

Cost per sqm (US\$)



Cost Saving:

Material costs could be 15-20% lower when using Intershield 4000USP as a primer compared to systems using zinc rich primers.

Reduced Complexity:

A single primer specification for anti-corrosion and fire protection areas, resulting in a simplified specification.

Improved Productivity:

Easy application, fast cure and low temperature cure capabilities enable shortening of painting schedules.

Applicator & Environment Friendly:

Low VOC content for improved Health & Safety and reduced environmental impact.

*C5 High Durability as per ISO12944:2018 Part 5. Typical cost estimated for a 3 coat system with a primer, epoxy intermediate and polyurethane topcoat.

Saving you time and money through specification simplicity

A complex specification often leads to unforeseen expenses and delays, with increased chance of human error and a requiring larger construction teams to inspect and monitor execution. Indeed, a 2017 study by the UK Oil & Gas Authority found that the average project in the UK Continental Shelf suffered delays of 10 months and cost over-runs of 35%, and that “many (but not all) operators issue too many specifications – many of which are not applicable or even contradictory”.

Building on its unrivalled industry experience as the preferred coating supplied for large new construction projects, AkzoNobel has developed a range of Universal coatings formulated to promote specification simplicity. **Intershield 4000USP** takes this concept a step further as a new construction primer, combining versatility in terms of substrate, thickness, application conditions, construction environment and end use (both anti-corrosive and fire protection schemes).



Test data and typical systems

The development of Intershield 4000USP involved rigorous testing using accelerated corrosion tests as well as exposure in harsh external weathering sites. Extensive in-house and third party testing has confirmed the efficacy of Intershield 4000USP in providing long term protection in C4 and C5 environments.

Test data available for Intershield 4000USP includes:

- Accelerated corrosion tests done in-house as well as at third party labs as per ISO12944-6:2018, confirming suitability for use as Very High Durability systems for C4 and C5 environments
- External weathering exposure at coastal exposure sites in temperate and tropical locations
- Fire testing and cryogenic spill testing with Chartek systems

Approved schemes

Intershield 4000USP has been approved as a primer for C5 environments. Below are examples of approved schemes for the different environments:

C5 Very high durability

	Scheme	DFT (µm)
1	Intershield 4000USP	75
	Intergard 475HS	145
	Interthane 990	60
	Total	280
2	Interzinc 4000USP	75
	Intergard 475HS	185
	Interthane 990	60
	Total	320
3	Interzinc 4000USP	100
	Intergard 475HS	200
	Interthane 990	60
	Total	360

C4 Very high durability

	Scheme	DFT (µm)
1	Intershield 4000USP	75
	Intergard 475HS	115
	Interthane 990	50
	Total	240
2	Intershield 4000USP	200
	Interthane 990	60
	Total	260

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