

# Chromate-free paint systems

AkzoNobel: the global leader in corrosion prevention



AkzoNobel's legacy in anti-corrosion aerospace coatings is the cornerstone of our global leadership position. In 1996, our unrivalled track record in chromate-free coating systems began, and we have been refining our products ever since, providing new alternatives to chromate-based exterior systems with exceptional results:

1996	2006	2010	2014
Introduction of <b>Aviox CF Primer</b> , the industry's first total chromate free primer for exterior finishing in maintenance applications.	Replacement of a chromate-based refresh primer with a <b>chromate-free alternative</b> , reducing the overall toxicity levels in anti-corrosion paint systems.	Introduction of the first ever lithium-based primer <b>Aerodur 2111</b> and magnesium-rich <b>Aerodur 2100 MgRP</b> for unrivalled corrosion protection.	Debut of <b>Aerodur HS 2118</b> ; a cutting-edge lithium-based primer compliant with the AMS 3095A specification with the ability to replace washprimer systems.

With each innovation, our chromate-free products have become better and better, as we develop, manufacture and sell coatings for application by OEMs and in maintenance facilities.

Our products provide outstanding protection and appearance without compromising on safety and sustainability, so when it comes to chromate-free alternatives, there's no substitute for our decades of experience.



## Why go chromate-free?

Hexavalent chromium is the most commonly used corrosion inhibitor for aircraft, however it is subject to increasing regulations due to environmental and health and safety concerns. There has never been a better time to look for alternative solutions, future-proofing your operations while helping to make the industry safer. With our world-class expertise and continuous pioneering research, you can go chromate-free with confidence, safe in the knowledge that your aircraft's coatings will offer the best in corrosion protection.

As the #1 leader in sustainability within the chemical industry, we have an unwavering commitment to supporting a liveable world environment and finding sustainable opportunities where none seem to exist.



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## What chromate-free products do we offer?

We offer three primary chromate-free solutions for exterior application:

A magnesium-rich coating that works through the unique cathodic protection mechanism, safeguarding aluminum just as zinc safeguards steel. Meeting the AMS 3095A and military specifications, 2100 MgRP has exceptional performance in corrosion protection, outperforming chromated systems under certain conditions.

Using our patented lithium-based technology, 2111 provides active protection through the same leaching process as chromate-based primers. It is optimized for Boeing specifications.

Following 2111, HS 2118 was tailored to the AMS 3095A specification. Consistent performance with direct-to-metal application and all pre-treatments makes it our most flexible product for maintenance application.

## What's next for our chromate-free range?

We have an ongoing commitment to providing chromate-free solutions in the aerospace industry, and that means an ongoing commitment to working with you. For decades, we have been partners in ensuring the sustainable performance of aircraft, generating proven performance and transparent results so you can trust in the reliability of our coatings.

Our next chromate-free innovation will be a durable, high-performance coating for aircraft structures and repairs. It will draw upon our proven and trusted primer technology, coupled with the latest advancements in corrosion inhibition developed and patented by AkzoNobel, to deliver sustainable protection, superior robustness and ease of application.

Our global leadership in corrosion protection is enhanced by decades of experience and partnerships with key OEMs, first-class universities, and research institutes. With our unrivalled skill, technical knowledge and global support network, AkzoNobel remains the ideal partner to support you in developing chromate-free systems for your aircraft.

[www.akzonobel.com/aerospace](http://www.akzonobel.com/aerospace)

AkzoNobel is a leading global paints and coatings company and a major producer of specialty chemicals. We supply industries and consumers worldwide with innovative products and are passionate about developing sustainable answers for our customers. Our portfolio includes well-known brands such as Dulux, Sikkens, International and Eka. Headquartered in Amsterdam, the Netherlands, we are consistently ranked as one of the leaders in the area of sustainability. With operations in more than 80 countries, our 50,000 people around the world are committed to delivering leading products and technologies to meet the growing demands of our fast-changing world.

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