

## Introduction

The European Chemical Agency (ECHA) has determined that Hexavalent Chromium compounds are part of the REACH directive Annex XIV and as such, was issued a sunset date for Sept 2017.

However application for an extension to this has been applied for meaning that it's use, can be continued under the pending authorisation, until a decision has been made. However it does appear that ultimately it will be banned.

Frost Electroplating over the last few years have been actively pursuing alternative processes that are fully REACH compliant in the longer term. The market leader appeared to be Surtec 650, a Trivalent Chromate based Chemistry that generally meets the requirements of the Mil & Def Standards.

Whilst offering this as an alternative, we continued to look at and develop other processes available to us. We have developed what we believe to be a superior product, when used as a conversion coating on 2000 series aluminium, and also when used as a seal for anodised finishes.

**The following pages show the features, benefits and characteristics.**

## Features

Creates a robust Conversion Coating for corrosion protection

Significantly enhances the corrosion protection of Anodised Aluminium when Sealed in FCCIII (>2000 Hours)

Promotes a perfect key for subsequent paint applications

## Benefits

Contains No Hexavalent Chromium

Fully compliant with REACH, RoHS & ELV Directive

Easily exceeds Mil & Def Stan requirements on all Aluminium alloys including 2000 & 7000 series

## Salt Spray Test Results in accordance with ASTM B117 To Failure

FCCIII	Specification	Surtec 650 <sup>1</sup>	
2024 T3 Conversion Coated	168Hours	96 Hours	264 Hours
7075 T6 Conversion Coated	168Hours	216 Hours	480 Hours

## Coating Characteristics

Coating Weight	MIL-DTL-81706	Surtec 650 <sup>1</sup>	FCCIII
Class 1A Type II	>10mg/ft <sup>2</sup>	22mg/ft <sup>2</sup>	30mg/ft <sup>2</sup>
<b>Electrical Contact Resistance</b>	<b>Specification</b>		
Before Salt Spray Testing	<5000μΩ/in <sup>2</sup>	2490μΩ/in <sup>2</sup>	2300μΩ/in <sup>2</sup>
After Salt Spray Testing	<10000μΩ/in <sup>2</sup>	4720μΩ/in <sup>2</sup>	5200μΩ/in <sup>2</sup>

***For all enquiries please do not hesitate to contact the Frost Technical Sales Team***

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<sup>1</sup> Process applied at Frost and independently tested