

**SURFACE TREATMENT**  
**NON CHROME PASSIVATE**  
**DSF 1.1.7**

**Definition:**

**Non chrome passivation** has been developed in response to the ELV, RoHS and WEEE directives. This process does not contain Lead, Cadmium, (hexavalent or trivalent), Mercury, PBB or PBDE compounds. It is an environmentally friendly chemical treatment that produces a clear protective conversion coating on aluminium and its alloys.

Simply, it can be used as a direct replacement in the traditional chromate process without any additions or changes to the treatment procedure and unlike conventional Chromate coatings that require up to 24 hours to cure, it provides a hard amorphous crystalline coating as formed.

**Treatment Information:**

The engineering drawing will identify the area to be coated.

Before coating the surface of the aluminium must be free of scratches and other blemishes.

Passivation is the process of making a material "passive" (less affected or corroded by the environment ) it is used to remove oxidized impurities on the inner and outer surface of the material.

The product is immersed in a dilute solution of nitric acid and peroxide oxidizers and rinsed with deionized water. The passivation film helps inhibit further corrosion of the metal.

**Appearance:**

The finished article shall be free from visible plating defects such as blisters, pits or un-plated areas.

The coating will be smooth and adherent, clean and free from damage.

This coating does not significantly change the appearance of the aluminium substrate and is referred to as a 'clear' finish.

| Issue | 01   | 02    | 03    | 04 | 05 | 06 | 07 | 08 | 09 |
|-------|------|-------|-------|----|----|----|----|----|----|
| DCR   | 7158 | 32486 | 44725 |    |    |    |    |    |    |



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**Description:**

**Iridite NCP:** is a clear environmentally safe, chrome-free passivation treatment designed specifically for aluminium alloys. It applies a highly corrosion-resistant conversion coating (exceeds ASTM B117-16) that can withstand high temperatures, suitable for painting & powder coating (exceeds ASTM 3359-09) or left as a final finish. (Mil-C-5541F)

The electrical conductivity of Iridite NCP compares favourably with traditional chromate treatments making it an ideal pre-treatment for electrical grounding applications (non-insulating).

**Properties:**

- Bare corrosion resistance without painting.
- Excellent adhesion to paints, sealants and adhesives.
- Environmentally compliant—contains no hexavalent or trivalent chromium compounds.
- Simple application using spray or immersion methods.

**ASM (DEK) Applications:**

Aluminium components & assemblies that require a clear durable, conductive finish.

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