HOLDER
OBERFLÄCHENTECHNIK

cleaning and passivation of aluminium

conversion coating zero chrome (VI)

The characteristics of aluminium surfaces can be improved exactly by depositing of a conversion coating. In this process, the non-uniform oxide film of the AL-surface is removed and replaced by a defined thin and resistant conversion layer. The applied layers meet the requirements of the electronic scrap regulations and the EU-end-of-life-vehicle directive.

advantages

- **enhanced corrossion protection**
- **excellent surface for subsequent paint or foil coating**
- **the application of this extremely thin film inhibits the formation of the natural oxid layer**
- **those layers are an excellent basis for the following processes:**
  - welding
  - painting
  - glue
  - vulcanise
- **environmentally sustainable method**

Leading the way in corrosion protection technology.

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technical data

among others, meets the requirements of:

- **Porsche**
  Porsche Standard PTL 7556 (see ❶)
  Porsche Standard PTL 7555 (see ❷)
  „Converse coating of Aluminium semis and aluminium components"
- **VW**
  VW Standard TL 824 27 (see ❶)
  VW Standard TL 824 28 (see ❷)
  „Washing and passivation of Aluminium components"
- **Mercedes-Benz**
  Mercedes-Benz delivery specification DBL 4952
  „Delivery specification for Aluminium surfaces in car body"
  Version 10 (see ❶)
  Version 11 (see ❷)
- **BMW**
  BMW PV 97022 (see ❷)
  procedural requirement
  „Conversion layers on Aluminium"

product features

❶ cleaning with silicate layer (Gardoclean 299)

layer thickness:	2 – 7 mg/m²
corrosion protection:	storage protection up to 3 months
features:	improvement adhesion (glue)

❷ Ti conversion layer (Alodine 2040 / Bonderite M-NT 2040)

environmental relevance:	chrome(VI)-free, developed in respect of the new european environmental directives
layer thickness:	2 – 15 mg/m²
corrosion protection:	storage protection up to 3 months
features:	improvement of weldability and adhesion (glue and lacquers)
temperature:	insensitive
surface resistance:	< 20 µOhm/cm²
fields of application:	wrought aluminium alloys, cast parts and forged metal parts

❸ chrom III (Surtec 650)

environmental relevance:	chrome(VI)-free, developed in respect of the new european environmental directives
standard:	e.g. VW TL 13750 V111
layer thickness:	50-400 nm
corrosion protection:	up to 720 h salt spray test according to DIN EN ISO 9227 – NSS (depending on the material)
color:	slightly iridescent, visible layers
temperature:	temperature resistant up to 212° F
surface resistance:	< 0,8 mOhm/cm²
fields of application:	wrought aluminium alloys, cast parts and forged metal parts

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