POLIGRAT-PRODUCTINFORMATION TITAN COLOR II

Coloring of titanium and titanium alloys by anodising



Colored titanium surfaces have significantly improved corrosion resistance compared to uncolored surfaces.

In addition to decorative applications and marking, implants are rendered passive and biocompatible by coloring in medical technology.

Properties and effect

TITAN COLOR II is a process for coloring of titanium and titanium alloys by anodising the workpieces. A large variety of attractive, repeatable rainbow colors can be achieved.

The influence of electrolyte and direct current, oxidizes the surface of the material and a firmly adherent and dense oxide layer is formed. Anodising with **TITAN COLOR II** does not remove any material from the surface of a workpiece and does not apply any layers on to the surface. The result is a pure, closed metal oxide layer.

TITAN COLOR II expands the color spectrum especially to the green tones, which are generated at higher voltage. The surfaces show a very good grip and resistance against fingerprints.

TITAN COLOR II is a slightly alkaline electrolyte and is classified neither as hazardous good nor hazardous substance.

Application

TITAN COLOR II is supplied ready for use and used in immersion bathing. The work pieces can be processed on a jig. Small workpieces can also be colored in a basket. Care must be taken that the workpieces are kept in sufficient contact with the basket while anodising.

The process electrolyte is no hazardous substance according to hazardous substances regulations and can disposed of without further treatment as 1% rinsing water.



With TITAN COLOR II colored titanium workpieces

Technical data

Specific weight/density: 1.005 - 1.015 g/ml Application: undiluted Working temperature: $+20 \text{ to } +40^{\circ}\text{C}$ Anodising voltage: up to 120 V Current density: max. 1A/dm^2

Supply

Packing units:

Single-use canister 30 kg (26 l)
Barrel 202 kg (200 l)

Your advantage

- selectable colors, especially green tones
- stable process
- biocompatible and corrosions-resistant
- not sensitive for fingerprints
- classified as non-hazardous good and substance