

# POLIGRAT-PRODUCTINFORMATION

## POLIGRAT TITAN COLOR G



Anodising of titanium and titanium alloys and turning the surface into grey

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 G** is a process for coloring titanium and titanium alloys with a titanium content >85% by anodizing the workpieces.

Anodising including plasma discharging creates a grey, ceramic titanium-oxid layer on the surface of the workpieces. The layer is closed and firmly adherent, mechanically and chemically very stable as well as electrically insulating. A titanium-oxide layer thickness of 2 - 4  $\mu\text{m}$  is formed.

### Application

**TITAN COLOR G** is supplied ready for use and used in immersion bathing. The workpieces can be processed on a jig. Bulk material with a weight of >5 g can be treated as single layer in baskets. Care must be taken to a sufficient electrical contact of workpiece and support. Partial coloring is not possible.

The rinsing water produced is strongly acidic and contains the dissolved metal. It is to be treated and disposed of according to the statutory laws and regulations.

### Technical data

Specific weight/density:	1.70 – 1.74 g/ml
Application:	undiluted
Working temperature:	+20 to +60°C
Anodising voltage:	120 to 150 V
Current density:	max. 1A/dm <sup>2</sup>



Medical titanium workpieces with a grey ceramic titanium-oxid layer

### Supply

Packing units:

▪ Single-use canister	30 kg (26 l)
▪ Barrel	344 kg (200 l)
▪ IBC	1,720 kg (1,000 l)

### Your advantage

- chemically resistant surface
- surface harder than titanium
- electrically insulating
- prevent cold welding