

Tridur® Zn H11

Black passivate for alkaline zinc



General Metal Finishing

Corrosion resistant coatings

atotech.com



A scratch-resistant black passivate for alkaline zinc surfaces

120 h

resistance against white corrosion possible with Tridur® Zn H11 + sealer

Excellent corrosion protection and striking aesthetic appeal

With Tridur® Zn H11, Atotech introduced a conversion coating, which lends extra mileage to alkaline zinc surfaces. The new passivate provides an outstanding homogenous black appearance and outperforms conventional black passivates in terms of scratch resistance. It's a fluoride-free, robust passivate highly suitable for barrel applications.

Tridur® Zn H11 is a three-component system that allows the process to be adjusted to individual requirements. It consists of highly concentrated additives, a blackening agent, and a third solution supplementing the additives. The solution is mixed on-site and dosed according to individual conditions and requirements. Consequently, the bath lifetime is extended. In combination with MKS' Atotech sealers and post-dips, Tridur® Zn H11 offers a high level of protection against white corrosion for up to 120 hours.

Highly corrosion resistant, glossy black passivate



Figure 1:
Tricotect® regeneration system
Figure 2:
Alkaline zinc / Tridur® Zn H11 /
Corrosil® Plus 301 W

Increased efficiency

Tridur® Zn H11 is suitable for use with MKS' Atotech Tricotect® regeneration system. Tricotect® allows for the continuous and selective removal of iron and zinc contamination from passivate solutions, preventing hazing and discoloration of passivate films and ensuring a consistent high plating quality.

Make-up of 100 l

Water	86.0 l	---
Tridur® Zn H11 A	12.0 l	14.3 kg
Tridur® Zn H11 B	4.0 l (4.0 l - 5.0 l)	4.2 - 5.2 kg

Working parameters

Temperature	40 °C (30 - 45 °C)
pH	2.0 (1.8 - 2.4)
Immersion time	40 seconds (30 - 50 seconds)

Features & benefits

- Fluoride-free black passivate for alkaline zinc
- High corrosion protection against white rust up to 120 h
- Tricotect® compatible
- Better scratch resistance than conventional passivates
- Can be used on heat-treated parts (200 °C/6 h)
- Improved glossiness
- Long lifetime without Tricotect® up to 3 m²/l confirmed
- No decomposing of additives after idle time

