

# ZinKlad® 1000 B

Hexavalent chromium-free coatings



## Black finish high performance coating

**ZinKlad 1000 B** the high performance black coating for automotive applications. Hexavalent chromium-free, with a deposit hardness above 500 HVN it is extensively used for exterior, interior, self-thread cutting fasteners and steel pressings. Production proven for over 10 years, it delivers an exceptional black appearance and corrosion resistance.

**ZinKlad 1000 B** is specified by global automotive manufacturers including Chrysler-FIAT, Ford, GM, PSA, Renault and VW-Audi. Today there are more than 15 application lines around the world producing **ZinKlad 1000 B** every day.

**ZinKlad 1000 B** coupled with the appropriate Torque 'N' Tension coating provides exceptional corrosion resistance and a consistent coefficient of friction. It is available in 3 performance levels:

- B – Glossy finish
- B (EXP) – Glossy finish with an average 0.12 coefficient of friction
- B (HG) – High gloss finish with an average 0.11 coefficient of friction

When it comes to providing outstanding coating aesthetics and corrosion protection that automotive engineers rely on, **ZinKlad 1000 B** delivers.

## KEY FEATURES

- Glossy and uniform black finish
- Exceptional corrosion protection
- Low coating thicknesses
- Extensively specified
- Global availability



# ZinKlad® 1000 B

Hexavalent chromium-free coatings

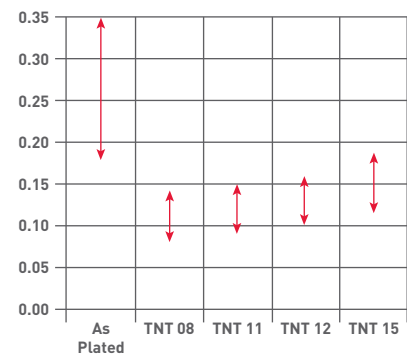


## ZinKlad 1000 B performance data

**ZinKlad 1000 B** combines an homogenous metallic zinc-nickel deposit of 8 microns minimum thickness, with a black passivate. This hard metallic coating is further protected against the formation of white corrosion products by the application of trivalent passivate with an option of a specialist topcoat layer. **TriPass ELV** trivalent chromium passivates impart a black color. **Torque 'N' Tension** topcoats provide increased corrosion resistance and modify surface properties to ensure uniform torque and clamping characteristics. Combined these ensure that **ZinKlad 1000 B** consistently meets minimum performance demands for corrosion resistance and torque modification.

Corrosion performance (ASTM B-117)		
	First white corrosion	First red corrosion
ZinKlad 1000 B	240 h	1000 h

### MacDermid Enthone friction control on zinc-nickel electroplate



### Recommended processes used to create ZinKlad 1000 B coatings

<b>Zinc-Nickel</b>	<b>Provides the sacrificial protection</b>
<b>Enviralloy Ni 12-15</b>	Alkaline, particularly recommended for plating fasteners
<b>Enviralloy Ni 12-15 G2</b>	Alkaline, Next generation of Enviralloy Ni technology, recommended for plating fasteners
<b>Enviralloy NiSpeed</b>	Alkaline, fast plating rates for rack and barrel applications
<b>Trivalent Passivates</b>	<b>Protects the zinc deposit from white rust</b>
<b>TriPass ELV 5100*</b>	Good black appearance with excellent corrosion resistance
<b>Topcoat</b>	<b>Improves corrosion resistance and modifies friction properties</b>
<b>Torque 'N' Tension 08</b>	Average CoF 0.11, recommended for self-cutting screws
<b>Torque 'N' Tension 11,12,15</b>	Average CoF 0.11, 0.12, 0.15 for fasteners
<b>Torque 'N' Tension 15 Black</b>	Average CoF 0.15, fasteners

\* Recommended for use with sealer



For more information, please contact us at:  
**Email:** [ISenquiries@macdermidenthone.com](mailto:ISenquiries@macdermidenthone.com)  
[macdermidenthone.com/industrial](http://macdermidenthone.com/industrial)  
 © 2019 MacDermid Enthone