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## PRODUCT DATA SHEET

**PRODUCT:** **TOPSHIELD 2K TITANIUM**  
**High-performances heat curing one component coating**

**CODE:** **COMP. A C37611 TOPSHIELD 2K TITANIUM**  
**COMP. B CC760E - TOPSHIELD ACTIVATOR**

**PRODUCT DESCRIPTION:**

Topshield 2K TITANIUM is an evolution of the TopShield 2K coating. Designed to be used in the Military & LE field, it guarantees even higher mechanical seals and abrasion resistance. The formulation enriched by the presence of titanium easily exceeds the strict requirements of the reference MIL standards, so that it is the best solution for the protection of weapons, accessories, optics, knives, etc., and for operation in extremely severe conditions. Like TopShield 2K, this series also guarantees exceptional scratch and abrasion resistance thanks to the high content of ceramic components and, thanks to the presence of PTFE, it has anti-friction characteristics. Acid or basic aqueous solutions, hydrocarbons, lubricating and protective oils and solvents are not able to attack the product even for prolonged periods of contact. TopShield 2K TITANIUM is extremely simple to apply, has excellent coverage and a fine semi-matte finish. The product can also be used on heat sensitive substrates (for example Ergal or other aluminum alloys hardened by precipitation) simply by curing at 155°C for 60 minutes.

**SURFACE PREPARATION:**

TOPSHIELD 2K TITANIUM can adhere to all metallic substrates, on chemical conversion coatings (phosphate conversions) and on anodized aluminium. To bring the performance level to the top it is suggested to accurately sandblast the surface at low incision profile ( $Ra < 5\mu m$ ) by using 80-100 mesh corundum. The product must be applied strictly on dry surfaces, clean, perfectly free of oil, grease, dust, moisture or other contaminants.

**APPLICATION METHODS:**

Spraying by conventional air spray gun

**APPLICATION INSTRUCTIONS:**

CONVENTIONAL SPRAY LOW PRESSURE PUMP		AIRLESS AIRMIX	
Nozzle diameter (mm)	<b>1,5÷2,0</b>	Pressure ratio	÷÷
Product pressure (Atm)	<b>1,0÷1,7</b>	Nozzle diameter (inch)	÷÷
Air pressure	<b>2,5÷3,5</b>	Product pressure (Atm)	÷÷



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## TECHNICAL DATA:

Mechanism of hardening	<b>Heat curing</b>
Specific weight (kg / l) *	<b>1,2 (±8%)</b>
Volume solids (%) *	<b>43 (±1%)</b>
Medium dry film thickness (microns)	<b>22,5 ±7,5</b>
Correspondence wet film thickness (microns)	<b>52</b>
Yield to the average or recommended thickness (m <sup>2</sup> / kg) *	<b>16</b>
Yield to the average or recommended thickness (m <sup>2</sup> / lt) *	<b>19</b>
Consumption at the average or recommended thickness (lt / m <sup>2</sup> ) *	<b>0,05</b>
Passivation time at 25 ° C (min)	<b>15</b>
Hard dry at 155 ° C (minutes)	<b>60</b>
Hard dry at 180 ° C (minutes)	<b>30</b>
Recommended application temperature (° C)	<b>+5 ÷ +35</b>
Max. nominal continuous service temperature (° C)	<b>350</b>
Mixing ratio by weight (Comp.A: Comp.B)	<b>(4:1) 25%</b>
Mixing ratio by volume (Comp.A: Comp.B)	<b>(3:1) 33%</b>
Thinner	<b>6000760</b>
Maximum dilution (% volume)	<b>15%</b>
Aspect of the film	<b> matt</b>
Color	<b> On request</b>
Storage in suitable conditions (months)	<b> 12</b>
Storage after activation (months)	<b> 3</b>

N.B.

\* Data referred to colour alluminium. The solid content values, specific weight and yield were calculated with theoretical method. Thickness and performance are only indicative, in fact vary greatly depending condition of substrate, dilution, absorption, porosity, surface irregularities and application method. Data referred to the mixture of component A + 25% by weight of Comp.B



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**ADDITIONAL  
INFORMATION:**

The product must be pre-activated. Before mixing the two components it is recommended to homogenize the component possibly with agitator and shake vigorously, possibly without opening, the packaging of component b. After mixing and addition of appropriate thinner, agitation should be continued until it became homogeneous. In order to use the correct mix ratio, necessary to obtain the best results, we recommend to mix only entire packs. In case you want to use only a portion of the pack, you should equip with adequate precision scale for mixing by weight and appropriate sized containers for mixing by volume. After the activation, the product is stable for three months. Before applying the heat treatment it is mandatory to let the coating dry in air at ambient temperature for 20 minutes. If this procedure is not performed, alterations in the aesthetic of the coating can occur.

**IMPORTANT NOTE**

All information contained in this form are the result of laboratory tests carried out under controlled conditions and well-defined and / or correspond to our most advanced and current technical and practical knowledge. this does not exempt the customer, given the variability of environmental conditions and personal systems of application, from carrying out their own investigations and to make their own eligibility checks. Mondial Color assumes no responsibility for any damage caused by improper use of the product. This sheet supersedes the previous editions.