



Technical Data Sheet

BDT-41 Nano-Ceramic Clear Bore Sealer

BDT-41 is a high performance • ambient air cured product that is an easy wipe-on application
BDT-41 creates a covalent bond to the substrate and a permanent part of the metallic structure
BDT-41 is extremely tough • Extremely High Temperature resistant (including direct flame)
BDT-41 has extreme corrosion resistance • hydrophobic properties & helps to stop jacket Fouling carbon and powder fouling within Bores and other components once treated.
BDT-41 is a super-slick dry film lubricating coating that works with or without the use of oils

In the Bore, upon firing, the intense heat & pressure sinters the Nano-Ceramics within the micro- pores of the barrel to an extreme level of hardness, further improving the corrosion and abrasion resistance. While the super-slick surface resists any build-up of carbon or jacketing fouling materials

BDT-41 Properties:

• Color	Clear
• Viscosity	16-18 sec. #2 Zahn
• Percent of Solids	18
• Odor (liquid)	Slight Solvent
• Odor (cured)	None
• V.O.C.	Exempt per CFR 51.1 /
Regulation 8	
• RoHS	Compliant
• REACH	Compliant
• Halogens	None
• Thermal Stability (cured)	1200°F (648.8°C)
• Conical Bond (1/8 inch mandrel)	Passed (ASTM D522-93a)*
• Cross cut adhesion	5B (ASTM D3359)*
• Coefficient of Friction	0.03u (ASTM)
• Specific Gravity	0.889 (ASTMD891-09)
• Pencil Hardness	8h (ASTM D3363)
• Average applied dry film thickness	2 to 3 microns
• Estimated Coverage Rate(@ 3 microns)	4,200 sq./ft. per gallon
• Transfer to surrounding material	Zero (0) transfer of contaminates
• Dry to Touch (time @ambient)	15 – 25 minutes, average(*a warm airflow will reduce time required to reach “Dry to the Touch”)
• Ambient cure (full properties)	5 days
• Ambient cured properties normally exceed those of oven cure	
• Oven cure (convection type-airflow)	350°F 30 minutes (part temperature)