

AT 1670 - ALPHATEK NON-STICK INDUSTRIAL BLADE BASE

NANO-CERAMIC COATING

TECHNICAL DATA SHEET

AT 1670 is a high performance, single component coating specifically designed to protect and revitalize industrial blades. It creates a thin, incredibly durable ceramic protective layer on cutting surfaces. It revitalizes cutting surfaces by smoothing out imperfections caused by past corrosion pitting, uneven abrasion wear and general wear & tear. This creates a sharper, more efficient cutting surface. Secondly, the ceramic surface coating will protect the blade from future damage. The overall result is a sharper, more efficient cutting tool that performs better, lasts longer and requires less maintenance. AT 1670 is easily applied by wipe in ambient conditions.

Technical Data

Color	Clear
Viscosity	16-18 sec. #2 Zahn
Percent of Solids (%)	18
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" Mandrel) (ASTM D522-93a)	Passed
Cross Cut Adhesion (ASTM D3359)	5B
Coefficient of Friction (ASTM D2047)	0.03μ
Specific Gravity (ASTM D891-09)	0.889
Pencil Hardness (ASTM D3363)	8-9h
Odor (liquid)	Slight Solvent
Odor (cured)	None

Key Performance Properties

- Smoothens rough blade surfaces & reduces friction for maximum cutting performance
- Protects cutting edges from erosion and corrosion, thereby reducing maintenance and downtime
- Increase usable life of cutting equipment
- Creates a covalent bond to the substrate giving it an intrinsic bond to the cutting blade for maximum long term durability
- Contains no "free silicones" to contaminate finished products
- Clear finish
- Thin application
- Excellent coverage rate
- Easily applied by wiping
- Ambient cure, short dry time
- Environmentally friendly. VOC exempt.
- RoHS and REACH compliant

Common Applications

- Any type of industrial cutting blade, slitter, knife, razor, shear, etc.

Drying and Coverage Rate

Average Applied Dry Film Thickness	2 to 3 microns
Estimated Coverage Rate (@ 3 microns)	2,450 ft ² (60 m ² /Liter) per gallon
Dry to Touch Time (@ 77°F / 25°C) *Exposure to a warmer air flow (not exceeding 110°F) will accelerate drying times.	15 – 25 minutes (average)

Supplemental Information

AT 1671 can be used as a topcoat to create a "super slick" finish that will further improve cutting performance and longevity.