

**BONDERITE S-FN T-502 ACHESON  
GRAPHITE LUBRICANT  
(KNOWN AS DAG T-502)**

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**DESCRIPTION**

**BONDERITE S-FN T-502 ACHESON (known as DAG T-502)** is a combination of specialty processed carbon particles in a fluoroelastomer resin system designed to provide high resistance values. In its cured form, it exhibits both high and low temperature flexibility and moisture resistance. These benefits, when coupled with ease of application and long shelf life, make the product adaptable to a wide variety of uses. This product may also be mixed with other Dag® products to provide a wide resistance range.

**FEATURES**

- Withstands ambient temperatures of over 260°C (500°F)
- Remains flexible over temperature range of -40°C (-40°F) to over 260°C (500°F)
- One component, supplied ready for use
- Fast-drying and curing system

**BENEFITS**

- Design flexibility for performing under harsh temperatures; cost-effective multiple applications
- Controlled dry film thickness free of cracks providing controlled electrical properties, reducing scrap and rework
- Easy handling; reduces chances for error and increases yield of usable product
- Reduced energy costs; faster production rates for increased productivity and equipment utilization

**TYPICAL APPLICATIONS**

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| <ul style="list-style-type: none"> <li>• Chemically resistant conductive coating</li> <li>• Heat generating coatings</li> <li>• Impregnating paint</li> <li>• Electrostatic bleed of plastics, rubber, including epoxy electrical bushings</li> </ul> | <ul style="list-style-type: none"> <li>• Flexible charge-distributing coating</li> <li>• Cable coating</li> <li>• Thick film resistance networks</li> </ul> |
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<b>TYPICAL PROPERTIES</b> (of wet product)	Color :	black
	Pigment :	specialy processed carbon
	Binder :	fluoroelastomer
	Diluent :	methyl ethyl ketone (MEK)
	Consistency :	fluid
	Viscosity :	600 ± 200 mPa·s
	Density :	0.87 kg/l (7.2 lbs/gal)
	Solids content :	13%
	Flashpoint :	-5° C (23°F)
	VOC :	755 g/l (6.30 lbs/gal)
	Theoretical Coverage :	7.87 m <sup>2</sup> /kg @ 25 µm (277 ft <sup>2</sup> /gal @ 1 mil)
	Color :	black
	Sheet resistance :	130 ± 100 ohms/sq @ 1 mil (25 microns)
	Service temperature	
	-continuous :	275°C (525°F) maximum

**METHOD OF USE**

**Surface Preparation**

For maximum adhesion, all surfaces must be dry and free of contaminants, such as oil or chemical residues before applying **BONDERITE S-FN T-502 ACHESON (known as DAG T-502)**. Porcelains and other smooth substrates can be wiped with a solvent such as acetone, and then allowed to air dry. Porous substrates should be heated sufficiently after the solvent wipe to drive off any entrapped contaminants, solvents, and moisture.

**Mixing and Dilution**

**BONDERITE S-FN T-502 ACHESON (known as DAG T-502)** is supplied ready for use, if applied by brush. Dip and spray methods may require dilution with a solvent.

Using a mechanical stirrer or paint shaker, mix **BONDERITE S-FN T-502 ACHESON (known as DAG T-502)** thoroughly until it is of uniform consistency. Check to see that no sediment remains on the bottom of the container. Pour into suitable container for dilution (i.e., pressure pot, etc.). **BONDERITE S-FN T-502 ACHESON (known as DAG T-502)** as supplied is ready for brush, dip or roller coat application.

For spray application, **BONDERITE S-FN T-502 ACHESON (known as DAG T-502)** should be diluted, prior to use. A suggested starting point is one part product to two parts MEK by volume.

**Application**

For small production work and prototypes, a suction cup gun may be used, as long as **BONDERITE S-FN T-502 ACHESON (known as DAG T-502)** is thoroughly mixed prior to spray application. For intermediate production runs or many small parts, a propeller-type stirrer should be used in the suction gun to ensure coating uniformity. Full production is best handled with propeller-agitated pressure pot systems, as this provides the best in application efficiency.

The electrical resistance of **BONDERITE S-FN T-502 ACHESON (known as DAG T-502)** can be adjusted by controlling the film thickness. **BONDERITE S-FN T-502 ACHESON (known as DAG T-502)** can also be blended with Dag 503 (silver) to achieve various resistance values.



# **BONDERITE**® **BONDERITE S-FN T-502 ACHESON** **GRAPHITE LUBRICANT** (KNOWN AS DAG T-502)

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**Note:** Handle **BONDERITE S-FN T-502 ACHESON (known as DAG T-502)** as you would a quality automotive lacquer. AVOID DRY SPRAY, as this will cause poor adhesion. To reduce overspray, use the minimum atomization pressure required for adequate coverage.

## **Curing**

Air drying of the product is adequate for most applications. To assure complete solvent loss, the coating can be baked for 15 minutes at 150°C (302°F).

## **STORAGE/ HANDLING**

Shelf life for this product is 2 years from date of qualification under original seal. Keep container tightly closed when not in use. Store in a cool, well ventilated area. Empty containers may retain hazardous properties. Follow all MSDS/label warnings even after container is emptied.

## **APPLICATION ASSISTANCE**

Henkel's Application Specialists are available to assist you in production start-up with **BONDERITE S-FN T-502 ACHESON (known as DAG T-502)**. Visit our website [www.henkelna.com/metals](http://www.henkelna.com/metals) for more information.

## **HEALTH & SAFETY**

Please consult Material Safety Data Sheet.

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