

Technical Data Sheet

BONDERITE S-FN T-502 ACHESON

Known as Dag T-502 June 2016

PRODUCT DESCRIPTION

BONDERITE S-FN T-502 ACHESON provides the following product characteristics:

Technology	Lubricant
Product Type	Carbon dispersion in solvent
Application	Special electrical

BONDERITE S-FN T-502 ACHESON 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 BONDERITE products to provide a wide resistance range.

Features	Benefits
Withstands ambient temperatures of over 260°C	Design flexibility for performing under harsh temperatures; cost-effective multiple applications
Remains flexible over temperature range of -40°C to over 260°C	Controlled dry film thickness free of cracks providing controlled electrical properties, reducing scrap and rework
One component, supplied ready for use	Easy handling; reduces chances for error and increases yield of usable product
Fast-drying and curing system	Reduced energy costs; faster production rates for increased productivity and equipment utilization

Application Areas

- Chemically resistant conductive coating
- Flexible charge-distributing coating
- Heat Generating coatings
- Electrostatic bleed for plastics, rubber, including epoxy electrical bushings
- Cable coating
- Impregnating paint
- Thick film resistance networks

TECHNICAL DATA

(of wet product)

Lubricating solid	Specially processed carbon
Binder	Fluorelastomer
Solids content, %	~13
Diluent	Methyl Ethyl Keton
Viscosity (Brookfield), mPas	~600
Density, kg/m ³	~870
Flash Point, °C	-5
VOC (hydrated), g/L	755
Theoretical coverage,	~20
m² /kg/ 10µm	
(as cured)	

(as culeu)	
Color	black
Sheet restistance	$130 \pm 100 \text{ ohm/sq.}$ at 25 micron
Service temperature	maximum 275°C

DIRECTION OF USE

Preliminary Statement

Prior to use it is necessary to read the **Material Safety Data Sheet** for information about precautionary measures and safety recommendations. Also, for chemical products exempt from compulsory labeling, the relevant precautions should always be observed. Please also refer to the local safety instructions and contact Henkel for analytical support.

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. Porcelains and other smooth substrates can be wiped with a solvent such as acetone, 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 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 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 as supplied is ready for brush, dip or roller coat application.

For spray application, BONDERITE S-FN T-502 ACHESON 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, if BONDERITE S-FN T-502 ACHESON is thoroughly mixed prior to spray application.

For intermediate production runs or many small parts, propeller-type attachments should be used on the suction gun to ensure coating uniformity.

Full production is best handled with propeller-agitated pressure pot systems, which provide the best in application efficiency.

The electrical resistance of BONDERITE S-FN T-502 ACHESON can be adjusted by controlling the film thickness.

Note:

Handle BONDERITE S-FN T-502 ACHESON as you would a quality automotive lacquer.

AVOID DRY SPRAY, as this will cause poor adhesion.

To reduce overspray, use the minimum atomization ressure 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.

Storage

Store BONDERITE S-FN T-502 ACHESON in sealed packaging in a cold and ventilated area. Empty containers may retain hazardous properties. Follow all MSDS/label warnings even after container is emptied.

Shelf-Life

- 24 months from date of qualification under original seal.

Classification

Please refer to the corresponding **Material Safety Data Sheets** for details on:

Hazards identification Transport information Regulatory information

ADDITIONAL INFORMATION Disclaimer

Note:

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

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