



LUBRICANT, ASSEMBLY AID GEL FOR ELASTOMER COMPONENTS

WSS-M99B196-A1

1. SCOPE

The material defined by this specification is a quick drying, non-petroleum, water-miscible gel specially formulated for assembly of elastomer components. The material contains a corrosion inhibitor and can be diluted at: 1 part of concentrate to 8 part of water maximum.

2. APPLICATION

This specification was released originally as an assembly aid to lower the insertion effort for glass run channel seals. Note: This lubricant may cause stress cracking when in contact with ABS, PC, or PA.

3. REQUIREMENTS

3.1 APPROVED SOURCES

This specification requires the use of approved sources. Only the sources identified on the Ford Approved Source List (ASL) can be used when this specification is listed on the drawing, CAD file, or other documents. The list of approved sources is located within Ford at www.mats.ford.com or available externally through a Ford Materials Engineer.

This specification was released to allow this material to be purchased by Ford Purchasing. The specification number is also the part number in WERS. Material performance and selection is determined by line trials and verification testing on the components for which it is used.

The approved source for this specification is Klüber Klüberplus S 06-100.
SA TOX Number: 197431

3.2	COLOR (Visual)	light yellow/ white
3.3	DENSITY (DIN 51757-1 or ASTM D1298, at 20°C)	0.95 to 1.05 g/cm ³
3.4	KINEMATIC VISCOSITY (DIN 51562-1, ASTM D445/7042 at 40°C)	1300 to 1600 mm ² /s
3.5	pH (DIN 51369, electrometrically, undiluted)	8 to 9
3.6	EVAPORATION LOSS (ISO 3251 1h, 140°C, 10 g, dish 10 cm diameter, circular air)	90 to 95 %

4. GENERAL INFORMATION

The information given below is provided for clarification and assistance in meeting the requirements of this specification. Contact gmfs@ford.com for questions concerning Engineering Material Specifications.

Date	Action	Revisions	Rev. 0
2016 07 21	Released		



**4.1 ELASTOMER COMPATIBILITY**

(ASTM D4289, DIN 53505, DIN 53504, 168 hours immersion at 60°C)

Property / Elastomers	NBR (72NBR902)	EPDM (70EPDM281)	FKM (75FKM585)
Change in Volume	+ 4	+ 1	+ 5
Change in Shore A	+ 1	+ 1	+ 0

4.2 RESISTANCE TO STRESS CRACKING

(FLTM BO 127-03)

Note: Not tested for initial application. Lubricant must be tested for resistance to stress cracking when used for additional applications that come in contact with polymers such as PC, ABS, PC+ABS, ASA or acrylic

4.3 PAINT COMPATIBILITY

Compatibility with painted surfaces must be evaluated when used on future applications where paint may come into contact with this lubricant. The requirement to test and test methods shall be determined by materials engineering.

4.4 APPROVAL OF MATERIALS

Suppliers desiring approval of their materials shall first obtain an expression of interest from Purchasing, Design or Product Development, and Materials Engineering. The supplier shall submit a completed copy of their laboratory test reports, signed by a qualified and authorized representative of the test facility, demonstrating full compliance with all the requirements of the Material Specification. Tested material samples must be available for review upon request and kept for a minimum of one year. Upon request, the supplier will review the associated quality control documents (Process Failure Mode and Effects Analysis, Control Plans, Certification testing) with Ford.

4.5 SUPPLIER'S ONGOING RESPONSIBILITY

All materials must be equivalent in all characteristics to the material upon which approval was originally granted.

Prior to making any changes to the material originally approved, whether or not such changes affect the material's ability to meet the specification requirements, the supplier shall notify the affected Supplier Technical Assistance (STA), Purchasing, and Materials Engineering activities of the proposed changes (with reasons) by submission of a completed Suppliers Request for Engineering Approval, SREA.

For parts and components using Ford Engineering Material Specifications, all samples tested to the specifications for Design Verification (DV), Production Verification (PV) and Production Part Approval Process (PPAP) sign off must be kept until Job 1.

4.6 RESTRICTED SUBSTANCE MANAGEMENT STANDARD

Substance restrictions imposed by regulations or Company direction applies to the materials addressed by this document. The restrictions are identified in the Restricted Substance Management Standard WSS-M99P9999-A1 which is updated yearly. It is the supplier's responsibility to comply with this standard on a continuing basis through MDS and/or GMAP reporting.