

# **AEROSPACE MATERIAL SPECIFICATION**

SAE AMS3373	REV. C
Issued 198	1-01
Revised 199	5-10
Reaffirmed 200	1-01
Stabilized 201	2-01
Superseding AMS33	373B

Compound, Silicone Rubber, Insulating and Sealing 35 to 55

#### RATIONALE

This document has been determined to contain basic and stable technology which is not dynamic in nature.

#### STABILIZED NOTICE

This document has been declared "Stabilized" by SAE G-9, Aerospace Sealing Committee, and will no longer be subjected to periodic reviews for currency. Users are responsible for verifying references and continued suitability of technical requirements. Newer technology may exist.

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions. Copyright © 2012 SAE International

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SAE.

TO PLACE A DOCUMENT ORDER: 877-606-7323 (inside USA and Canada) Tel:

Tel: +1 724-776-4970 (outside USA) Fax: 724-776-0790

Email: CustomerService@sae.org

http://www.sae.org

SAE values your input. To provide feedback on this Technical Report, please visit http://www.sae.org/technical/standards/AMS3373C

SAE WEB ADDRESS:

### SCOPE:

#### 1.1 Form:

This specification covers elastomeric silicone insulating and sealing compounds supplied as two-component systems which cure at room temperature.

## 1.2 Application:

These products have been used typically for protecting the electrical integrity of electrical and electronic components by excluding moisture and contamination and by providing resilient cushioning between -50 and +205 °C (-58 and +401 °F), but usage is not limited to such applications. Compound may be applied by potting or encapsulating.

#### 1.3 Classification:

Compound covered by this specification is classified as follows:

Class 1 Low Viscosity
Class 2 Medium Viscosity

# 1.4 Safety - Hazardous Materials:

While the materials, methods, applications, and processes described or referenced in this specification may involve the use of hazardous materials, this specification does not address the hazards which may be involved in such use. It is the sole responsibility of the user to ensure familiarity with the safe and proper use of any hazardous materials and to take necessary precautionary measures to ensure the health and safety of all personnel involved.

## 2. APPLICABLE DOCUMENTS:

The following publications form a part of this specification to the extent specified herein. The latest issue of SAE publications shall apply. The applicable issue of other publications shall be the issue in effect on the date of the purchase order.

# 2.1 SAE Publications:

Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

AMS 2825	Material Safety Data Sheets
AMS 3020	Oil, Reference, for "L" Stock Rubber Testing
AMS 3021	Fluid, Reference, for Testing Di-Ester (Polyol) Resistant Materials
AMS 4049	Sheet and Plate, Alclad, 5.6Zn, 2.5Mg, 1.6Cu, 0.23Cr, Solution and Precipitation Heat
	Treated

#### 2.2 ASTM Publications:

Available from ASTM, 1916 Race Street, Philadelphia, PA 19103-1187.

<b>ASTM D 149</b>	Dielectric Breakdown Voltage and Dielectric Strength of Solid Electrical Insulating
	Materials at Commercial Power Frequencies
<b>ASTM D 150</b>	A-C Loss Characteristics and Permittivity (Dielectric Constant) of Solid Electrical
	Insulating Materials
ASTM D 257	D-C Resistance or Conductance of Insulating Materials
<b>ASTM D 412</b>	Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic
	Elastomers-Tension
<b>ASTM D 471</b>	Rubber Property - Effects of Liquids
ASTM D 495	High-Voltage, Low-Current, Dry Arc Resistance of Solid Electrical Insulation
<b>ASTM D 573</b>	Rubber - Deterioration in an Air Oven
<b>ASTM D 792</b>	Specific Gravity (Relative Density) and Density of Plastics by Displacement
ASTM D 1824	Apparent Viscosity of Plastisols and Organosols at Low Shear Rates by Brookfield
	Viscometer
ASTM D 2240	Rubber Property - Durometer Hardness

## 2.3 U.S. Government Publications:

Available from DODSSP, Subscription Services Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.

WIL-L-23699	Lubricating Oil, Aircraft Turbine Engine, Synthetic Base
MIL-H-83282	Hydraulic Fluid, Fire Resistant Synthetic Hydrocarbon Base, Aircraft
MIL-STD-2073-1	DOD Materiel, Procedures for Development and Application of Packaging
	Requirements