



AEROSPACE INFORMATION REPORT

AIR1364™
REV. B

Issued	1975-05
Reaffirmed	2003-12
Revised	2018-04

Superseding AIR1364A

(R) Age Control of Age Sensitive Elastomeric Materials

RATIONALE

This revision is to update specifications and replace obsolete specifications.

FOREWORD

The scope of this document is limited to nitrile elastomers and their blends.

MIL-STD-1523A, "Age Controls of Age-Sensitive Elastomeric Materiel (For Aerospace Applications)", requiring maximum ages of age sensitive elastomeric items for use in military aircraft and missiles and for space vehicles at the time of acceptance, was cancelled on 30 January 1995. The cancellation notice for MIL-STD-1523A replaces it by AS1933 for hose applications and ARP5316 for seal applications. In addition, MIL-HDBK-695 is applicable for all elastomeric parts not covered by these two specifications.

U.S. military specifications for nitrile rubber O-rings such as MIL-P-5315, MIL-P-5510, MIL-P-25732, and MIL-P-83461 [and their replacements AMS-P-5315, AMS-P-5510, and AMS-P-83461], which were formerly controlled by MIL-STD-1523A, are now age controlled by the three specifications cited in the paragraph above.

The following text is unchanged from the 1975 revision (except where indicated) and is republished for historical purposes.

1. SCOPE

This SAE Aerospace Information Report (AIR) summarizes data and background relative to age control of specific classes of those nitrile type synthetic elastomers used in sealing devices which are resistant to petroleum base hydraulic fluids, lubricating oils, and aircraft fuels. This includes, but is not limited to, those nitrile (NBR or BUNA-N) elastomers previously covered by Section I of MIL-STD-1523.

1.1 Purpose

To provide users with appropriate references and information correlating past need and use of age controls with current needs and to provide summary guidelines for consideration when future use of age controls is required or contemplated.

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 revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

Copyright © 2018 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: Tel: 877-606-7323 (inside USA and Canada)
 Tel: +1 724-776-4970 (outside USA)
 Fax: 724-776-0790
 Email: CustomerService@sae.org
 http://www.sae.org

SAE WEB ADDRESS:

**SAE values your input. To provide feedback
 on this Technical Report, please visit
<http://standards.sae.org/AIR1364B>**

2. REFERENCES

2.1 Applicable Documents

The following publications form a part of this document 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. In the event of conflict between the text of this document and references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

2.2 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

- AMS-P-5315 Acrylonitrile-butadiene (NBR) Rubber For Fuel-Resistant Seals 60 to 70
- AMS-P-5510 O-Ring, Preformed, Straight Thread Tube Fitting Boss, Type I Hydraulic (-65 to 160 °F)
- AMS-P-83461 Packing, Preformed, Petroleum Hydraulic Fluid Resistant, Improved Performance at 275 Degrees F (135 Degrees C)
- ARP5316 Storage of Elastomer Seals and Seal Assemblies Which Include an Elastomer Element Prior to Hardware Assembly
- AS1933 Age Controls for Hose Containing Age-Sensitive Elastomeric Material

2.3 U.S. Government Publications

Copies of these documents are available online at <http://quicksearch.dla.mil>.

- MIL-HDBK-695 RUBBER PRODUCTS: RECOMMENDED SHELF LIFE
- MIL-P-5315 PACKING, PREFORMED, HYDROCARBON FUEL RESISTANT (Canceled and replaced by AMS-P-5315)
- MIL-P-5510 PACKING, PREFORMED, STRAIGHT THREAD TUBE FITTING BOSS, TYPE I HYDRAULIC (-65 DEG.F TO 160 DEG.F) (Canceled and replaced by AMS-P-5510)
- MIL-P-25732 PACKING, PREFORMED, PETROLEUM HYDRAULIC FLUID RESISTANT, LIMITED SERVICE AT 275 DEG.F (135 DEG. C) - Inactive
- MIL-P-83461 PACKING, PREFORMED, PETROLEUM HYDRAULIC FLUID RESISTANT, IMPROVED PERFORMANCE AT 275 DEGREES F (135 DEGREES C) (Canceled and replaced by AMS-P-83461)
- MIL-STD-1523 AGE CONTROLS OF AGE-SENSITIVE ELASTOMERIC MATERIAL (FOR AEROSPACE APPLICATIONS) (Canceled and replaced by AS1933 and ARP5316)

2.4 Other Publications

ANA 438