



AEROSPACE MATERIAL SPECIFICATION	AMS1539™	REV. A
	Issued 1996-08 Stabilized 2018-04	
	Superseding AMS1539	
Cleaning Compound, Terpene Circuit Board Cleaner		

RATIONALE

Document is noncurrent and should be considered for stabilization.

STABILIZED NOTICE

This document has been declared "Stabilized" by the SAE AMS J Aircraft Maintenance Chemicals and Materials 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 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:

Full document details: [SAE AMS1539A](#)

SAE values your input. To provide feedback on this Technical Report, please visit <http://standards.sae.org/AMS1539A>

Documents
Document Sharing Hub

1. SCOPE:

1.1 Form:

This specification covers a terpene base solvent cleaner in the form of a liquid, which forms a transient emulsion with water.

1.2 Application:

The cleaner has been used typically for the removal of residual soldering flux and polar and non-polar contaminants from component populated circuit boards subsequent to soldering operations, but usage is not limited to such applications. The cleaner is used in in-line and batch cleaning systems with provisions for spray-under-immersion, ultrasonic immersion or immersion-spin cleaning, and with provisions for a water rinse.

1.3 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.

1.4 Precautions:

Repeated contact with the skin can cause irritation. Use of solvent resistant gloves and eye shield protection is recommended. The cleaner is combustible and is a Class II liquid based on National Fire Protection Association (NFPA) Standards.

1.4.1 Conventional industrial aqueous cleaning equipment systems are not suitable for use with cleaning compound covered by this specification.

- 1.4.2 Marking inks for use on circuit boards, components, and other parts to be cleaned in terpene cleaning compounds should be of the cross-linked or polymerizing type.
- 1.4.3 Components, used on circuit boards to be cleaned in terpene cleaners must be capable of complete immersion in water in that thorough water rinsing is required for removal of residual cleaning compound.
- 1.4.4 Use of silicone rubber, natural rubber, neoprene rubber, rubber based adhesives, styrene, or polyvinyl chloride resins on circuit board assemblies or other parts, to be cleaned using cleaner in accordance with this specification, must be evaluated for compatibility with the cleaner.

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

2.2 ASTM Publications:

Available from ASTM, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

ASTM D 93	Flash Point by Pensky-Martens Closed Tester
ASTM D 445	Kinematic Viscosity of Transparent and Opaque Liquids (and the Calculation of Dynamic Viscosity)
ASTM D 891	Specific Gravity of Liquid Industrial Chemicals
ASTM D 1078	Distillation Range of Volatile Organic Liquids
ASTM E 70	pH of Aqueous Solutions with the Glass Electrodes
ASTM E 1194	Vapor Pressure

2.3 U.S. Government Publications:

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

MIL-STD-2073-1 DOD Materiel, Procedures for Development and Application of Packaging Requirements

2.4 IPC Publications:

Available from IPC, 7380 N. Lincoln Avenue, Lincolnwood, IL 60640

IPC-TR-580 Cleaning and Cleanliness Test Program, Phase 1