



AEROSPACE INFORMATION REPORT

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Aerospace Fluid Power - Waste Reduction Practices for
Used Phosphate Ester Aviation Hydraulic Fluid

RATIONALE

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

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1. SCOPE

This SAE Aerospace Information Report (AIR) covers the generation of used phosphate ester aviation hydraulic fluid (AS1241) that is deemed waste because it does not meet in-service limits for use in aircraft. This document also lists the relevant United States Environmental Protection Agency (U.S. EPA) regulations on used hydraulic fluid that are in force at the time of this report's publication. Regulations of other countries as well as those for states and municipalities should be consulted prior to initiating any of the waste disposal recommendations listed here.

1.1 Purpose

The purpose of this document is to instruct the users of AS1241 hydraulic fluid on appropriate actions for minimizing the generation of waste hydraulic fluid, thereby allowing for longer service life of the fluid and reducing operating costs associated with the handling and disposal of waste fluid.

2. 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.

2.1 SAE Publications

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

ARP598	Aerospace Microscopic Sizing and Counting of Particulate Contamination for Fluid Power Systems
AS1241	Phosphate Ester Fire-Resistant Aviation Hydraulic Fluid
AS4059	Aerospace Cleanliness Classification for Hydraulic Fluids
ARP5376	Aerospace Fluid Systems and Components - Methods, Locations and Criteria for System Sampling and Measuring the Solid Particle Contamination of Hydraulic Fluids

2.2 ASTM Standards

Available from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA, 19428-2959, Tel: 610-832-9585, www.astm.org

ASTM D 445	Standard Test Method for Kinematic Viscosity of Transparent and Opaque Liquids (and Calculation of Dynamic Viscosity)
ASTM D 974	Standard Test Method for Acid and Base Number by Color-Indicator Titration
ASTM D 1217	Standard Test Method for Density and Relative Density (Specific Gravity) of Liquids by Bingham Pycnometer
ASTM D 6304	Standard Test Method for Determination of Water in Petroleum Products, Lubricating Oils, and Additives by Coulometric Karl Fischer Titration