



AEROSPACE MATERIAL SPECIFICATION

AMS-H-81829™

REV. B

Issued 1998-07
Noncurrent 2008-02
Stabilized 2023-05

Superseding AMS-H-81829A

Heat Transfer Fluid, Fluorochemical

RATIONALE

Transition from noncurrent to stabilized.

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1. SCOPE:

1.1 This specification covers inert, fluorochemical, liquid heat transfer agents.

2. APPLICABLE DOCUMENTS:

The following publications, of the issue in effect, on date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein.

2.1 U.S. Government Publications:

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

MIL-STD-105 Sampling Procedures and Tables for Inspection by Attributes
MIL-STD-290 Packaging, Packing, and Marking of Petroleum Products

2.2 ASTM Publications:

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

ASTM D 86	Boiling Range
ASTM D 97	Pour Point
ASTM D 445	Viscosity
ASTM D 877	Dielectric Strength
ASTM D 1298	Specific Gravity

3. REQUIREMENTS:

3.1 Material:

The heat transfer fluid shall be a clear, colorless, odorless, non-flammable, inert fluorochemical liquid.

3.2 Physical properties:

The physical properties of the heat transfer fluid shall conform to the requirements of Table I.

TABLE I
Physical Properties

Property	Limits	Test Paragraph
Boiling range 194 F°(90°C) to 225°F(107°C)	90 percent (minimum)	4.4.1
Viscosity 77°F(25°C) -40°F(-40°C)	0.50 centistokes (min.) 5.0 centistokes (max.)	4.4.1
Pour point	Less than -80°F(-62°C)	4.4.1
Specific gravity 25°C/25°C	1.72 ± 0.08	4.4.1
Hydrolytic Stability	10 micrograms per milliliter fluoride (max.)	4.4.2