

## Technical Data Sheet

## AXAREL® 2000

### Product Description

**AXAREL 2000 Precision Cleaner** is an approved MIL-PRF-680 Type II cleaner suitable for the replacement of isopropyl alcohol (IPA), acetone, methyl ethyl ketone (MEK), mineral spirits, PD-680 solvents and other low flash point, flammable solvents. The low vapor pressure of this cleaner can result in a significant reduction in VOC emissions. Designed for hand wiping, immersion applications and use in airless vacuum hydrocarbon equipment to leave substrates with very low surface residues while effectively removing a wide range of soils such as greases, mineral oils, lubricants, coolants, synthetics, and particulate matter. This can be used for cleaning prior to inspection (NDT), packaging, final assembly of component parts, maintenance operations, general purpose cleaning and degreasing, surface preparation prior to bonding, painting, plating, sealing, welding or further processing of parts. AXAREL 2000 is compatible with many polymeric substrates, elastomers and is safe for use with ferrous and non-ferrous alloys.

### Features and Benefits

- Approved MIL-PRF-680 Type II Solvent
- P-D-680 Replacement
- Low Toxicity
- Low Surface Residues
- Excellent Materials Compatibility
- Does Not Require Special Containers or Handling

### Properties

Odor	Essentially Odorless
Flash Point	144 °F (62 °C)
Specific Gravity (25 °C)	0.77
Viscosity (25 °C)	1.54 cps
Distillation Range	372-405 °F (189-207 °C)
Vapor Pressure (20 °C)	0.49 mmHg
Evaporation Rate (n-BuAc=1)	0.1
Surface Tension (25 °C)	25.1 dynes/cm
Non-Volatile Residue	30 ppm
Specific Heat (BTU/lb F)	~0.5
Latent Heat of Vaporization (BTU/lb)	~132

### Soils Removed

- Wide Range of Non-Polar Soils
- Corrosion Inhibiting Compounds
- Hydraulic Fluids
- Metalworking Fluids
- Oils
- Greases

### Equipment

Suitable for use in a variety of commercially available cleaning equipment including immersion tanks, low pressure spray-under-immersion systems and airless vacuum hydrocarbon systems.

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### Process

#### Manual Cleaning:

Apply at full concentration to the desired substrate by brush, pad or cloth.

#### Immersion Cleaning:

Add at full concentration to the wash tank reservoir. The use of ultrasonics or heat is not recommended.

#### Vacuum Equipment:

Add at full concentration to the wash chamber.

### Environmental/Regulatory

Ozone Depletion Potential (ODP)	Zero
Global Warming Potential (GWP)	Low
Volatile Organic Compound (VOC)	770 g/L
Hazardous Air Pollutant (HAP)	No
Superfund Amendments and Reauthorization Act (SARA)	Not regulated
National Emission Standards for Hazardous Air Pollutants (NESHAPs)	Not Regulated
Resource Conservation and Recovery Act (RCRA)	Not Regulated

### Disposal/Safety

#### Disposal

Vantage recommends contacting your current or local environmental service company for proper disposal.

#### Safety

Please see Safety Data Sheet for further information.

### Approvals and Testing

#### Approvals

- Airbus** A330 Maintenance Manual Item 11-002
- Airbus** Consumable Materials List (CML) (ref. MIL-PRF-680)
- Boeing** PSD 6-88 for BAC 5750
- Eurocopter** (ref. Canadian Coastguard)
- Goodrich** Wheels and Brakes Component MM 2-1577 Series
- Honeywell Aerospace** per MIL-PRF-680 Qualifications
- Lockheed Martin** STP57-201 Rev H. (EPS G41.14)
- Messier-Bugatti** Component MM 2-1577 Series
- Pratt & Whitney** PMC 9001-3, -4, -8
- MIL-PRF-680 Type II** Degreasing Solvent (QPL) (DS-0018)

#### Testing

ASTM F1110, F483, F945, D130, D1296, D1353

NSN 6850-01-474-2319, NSN 6850-01-474-2317, NSN 6850-01-474-2316, NSN 6850-00-637-6135

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### Packaging

Available in 32 lb (15 kg) pails and 353 lb (164 kg) drums.

### Shelf Life

36 months when stored in original, sealed container above 50 °F (10 °C).



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