

# **Technical Data Sheet**

**LENIUM® FHD** 

## **Product Description**

**LENIUM FHD Vapor Degreasing Solvent** is a mixture based on hydrofluorocarbons (HFCs) designed to operate in open-top and vacuum vapor degreasers. It can be used in manual cleaning operations requiring low surface residues and extremely fast evaporation. This aerospace approved heavy duty cleaner can effectively remove adhesives, buffing compounds, drawing oils, fluxes, pastes, greases, hydraulic oils, lapping compounds, resins, inks and silicone oils. LENIUM FHD is a highly stable, non-flammable solvent which does not contain hazardous air pollutants (HAPs). It is a drop-in replacement for trichloroethylene (TCE), HCFC-141b, HCFC-225, perchloroethylene (PCE), methylene chloride (MeCl) and n-propyl bromide (*n*PB). LENIUM FHD is compatible with many polymeric substrates, elastomers and is safe for use with ferrous and non-ferrous alloys.

#### **Features and Benefits**

- Aerospace Approved
- VOC Content is Half TCE, nPB
- Zero Ozone Depleting Potential
- Parts Do Not Exit Equipment Hot

- Excellent Stability
- Good Material Compatibility
- Low Surface Residues

## **Properties**

Specific Gravity (25 °C) 1.33 Viscosity (25 °C) 0.56 cps Vapor Pressure (20 °C) 496 mm Hg Vapor Density (20 °C) 3.4 Flash Point None 99 °F (37 °C) **Boiling Point** Specific Heat (25 °C) 0.31 Heat of Vaporization 48.0 cal/g 60 Kauri-Butanol (KB) Value Flammability Limits (Vol %) 6.5-11.0

## **Soils Removed**

- Adhesives
- Greases
- Buffing Compounds
- Hydraulic Oils
- Drawing Oils

- Lapping Compounds
- Resins and Inks
- Fluorinated Fluids
- Silicone Oils

## **Equipment**

Suitable for use in a variety of commercially available cleaning equipment including open-top and vacuum vapor degreasers.



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#### **Process**

**Manual Cleaning** 

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

Vapor Degreasing

Add at full concentration to the tank reservoir(s). See Vapor Degreasing Operating Manual for more information.

**Controller Settings** 

Liquid Temperature Controller Sensor (LTC)

High Temperature Controller (HTC)

Safety Vapor Controller (SVC)

Vapor Up Temperature (VU)

Primary Refrigeration Temperature

109 °F (43 °C)

114 °F (46 °C)

89 °F (32 °C)

89 °F (32 °C)

35-40 °F (2-5 °C)

## **Environmental/Regulatory**

Ozone Depletion Potential (ODP)

Global Warming Potential (GWP)

Volatile Organic Compound (VOC)

Hazardous Air Pollutant (HAP)

Zero

990

589 g/L

National Emission Standards for Hazardous Air Pollutants (NESHAPs)

Superfund Amendments and Reauthorization Act (SARA)

Resource Conservation and Recovery Act (RCRA)

Not regulated

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/Testing

**Approvals** 

**Boeing BAC 5408 Vapor Degreasing Specification (PSD 6-66)** 

**Boeing BAC 5750 Solvent Cleaning** 

Goodrich Power Systems Mono-Solvent Vapor Degreasing. NO: 914-014-078 to 085

Lockheed Martin EMAP G41.149

Rolls-Royce OMat 1/21E Vapor Degreasing

**Testing** 

Conforms to Boeing D6-17487

Conforms to **Douglas** CSD #1 (except: Stress Crazing on Acrylics)

ASTM F-483, F-485, F-502, F-519, F-945, F-1110, SAE ARP 1755B



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# **Packaging**

Available in 50 lb (23 kg) pails and 500 lb (227 kg) drums.

# **Shelf Life**

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









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