



Technical Data Sheet

LENIUM™ ES Vapor Degreasing Solution

Product Description

LENIUM ES Vapor Degreasing Solution is binary azeotrope of n-propyl bromide (*n*PB), isopropyl alcohol (IPA) and stabilizers designed for use in open-top and vacuum vapor degreasers. It is effective in electronics defluxing applications, removing solder flux residues and ionic contamination from circuit assemblies. LENIUM ES also removes adhesives, buffing compounds, drawing oils, greases, hydraulic oils, lapping compounds, resins, inks, silicone oils and waxes. It is a drop-in replacement for trichloroethylene (TCE), HCFC-141b, HCFC-225, perchloroethylene (PCE) and methylene chloride (MeCl).

Features and Benefits

- Electronics Cleaner
- Replaces TCE, PCE, etc.
- Removes Ionics
- Removes Flux Residues
- Low Surface Residues

Properties

Specific Gravity (25 °C)	1.25
Flash Point	None
Boiling Point	148-151 °F (64-66 °C)
Viscosity (20 °C)	0.49 cps
Vapor Pressure (20 °C)	110.9 mm Hg
Evaporation Rate (TCA = 1)	0.96
Specific Heat (25 °C)	0.27
Heat of Vaporization	58.8 cal/g
Kauri-Butanol (KB) Value	125

Soils Removed

- Flux Residues
- Hydraulic Oils
- Buffing Compounds
- Drawing Oils
- Lapping Compounds
- Silicone Oils
- Greases
- Waxes

Equipment

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



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Process

Add LENIUM ES at full concentration to the tank reservoir(s). See vapor degreasing operating manual for more information.

Controller Settings

Liquid Temperature Controller/Sensor (LTC)	164 °F (73 °C)
High Temperature Controller (HTC)	169 °F (76 °C)
Safety Vapor Controller (SVC)	144 °F (62 °C)
Vapor Up Temperature (VU)	144 °F (62 °C)
Primary Refrigeration Temperature	35-40 °F (2-5 °C)

Environmental/Regulatory

Ozone Depletion Potential (ODP)	0.013-0.018
Global Warming Potential (GWP)	Low
Volatile Organic Compound (VOC)	1250 g/L
National Emission Standards for Hazardous Air Pollutants (NESHAPs)	Not regulated
Superfund Amendments and Reauthorization Act (SARA)	Not regulated
Resource Conservation and Recovery Act (RCRA)	Not regulated
Permissible Exposure Limit (PEL, ACGIH)	0.1 ppm

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

Goodrich Landing LGPS 1400 Solvent Cleaning/Degreasing

Lockheed Martin EMAP G41.149

Safran In-1500 Products Used For Degreasing-Organic Solvents (n-Propyl Bromide)

Packaging

Available in 50 lb (23 kg) pails and 550 lb (249 kg) drums.

Shelf Life

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



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