



VaporFlor 4.5 Solvent

Key Benefits

VaporFlor™ 4.5 Solvent is the ultimate drop-in replacement for trichloroethylene (TCE), perchloroethylene (PERC), HCFC-225 and other regulated solvents in open top and vacuum vapor degreasers. VaporFlor 4.5 is non-flammable, SNAP approved and has outstanding solvency. Used as directed, VaporFlor 4.5 will help reduce hazardous emissions, minimize environmental reporting and is considered the low cost alternative when switching from chlorinated solvents.

Product Contents

VaporFlor 4.5 is a precise mixture of n-propyl bromide (nPB), alcohol and stabilizers. This powerful azeotrope is perfect for cleaning, rinsing and drying all types of precision parts in a waterless process. VaporFlor 4.5 should only be used in tightly controlled open top or vacuum vapor degreasers to minimize operator exposure and emissive losses.

Performance Properties

Appearance	Clear
Boiling Point	159F (71C)
Evaporation rate	4.5
Vapor Pressure	143 mmHg
Vapor Density	4.3
Water Solubility	2.5 g/l
Flash Point	None
Flammability Limits	4-9.5 (vol%)
Iso-Propyl Bromide	<100ppm
Acceptable Exposure Limit	25 ppm

Applications

VaporFlor Solvent can clean a variety of soils and residues including:

Solder paste Residues	Ionic Residues
Greases	Mineral Oils
Buffing Compounds	Waxes
Silicone	Lapping Compounds
Lubricants	Synthetic Oils

Vapor Degreaser Settings and Maintenance

Recommended settings for temperature and safety sensors on a typical vapor degreaser using VaporFlor 4.5 Solvent.

Refrigeration Thermostat (RT)	45F / 7C
Safety Vapor Control (SVC)	149F / 65C
High Temperature Control (HTC)	169F / 76C
Liquid Temperature Control/Sensor (LTC)	164F / 73C
Vapor Up Thermostat (VU/TH)	149F / 65 C

VaporFlor 4.5 Solvent can be used, distilled and recycled numerous times before losing the solvent loses its capacity to neutralize acid residues. As with all nPB-based solvents, this solvent should be monitored regularly to insure adequate acid acceptance levels. If acid acceptance levels ever reach >0.10% wt NaOH, remove the spent solvent from the sump and replace with fresh VaporFlor 4.5 Solvent.

Asphalt Content Extraction

VaporFlor 4.5 is suitable for use in certain asphalt content extraction processes. The product conforms with ASTM D-2172, ASTM D 6368, ASTM D 5404, and AASHTO T 319-031 test methods.

Compatibility

VaporFlor Solvent is compatible with most materials and parts typically cleaned with chlorinated solvents in vapor degreasers. For specific recommendations on plastics and elastomers, please contact Florachem.

Handling and Storage

VaporFlor 4.5 Solvent is classified as non-hazardous for transport by the U.S. DOT.

For international shipments, VaporFlor 4.5 Solvent is exempt from classification as a flammable material per Special Provision A3 under Sub Section 4.4 in the IATA.

Shelf life is 24 months in unopened, original containers.

Disposal

Incineration is the most common disposal method for nPB solvent waste. Contact your local waste management company for solvent recycling in your area.

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