



Chemical Corporation

UNIPLEX FRP-45 CAS NO. 26040-51-7

Uniplex FRP-45 is a liquid flame retardant for polyvinyl chloride that provides excellent plasticizing properties, in addition to flame retardancy. Uniplex FRP-45 provides the following advantages in polyvinyl chloride, as well as in other elastomers such as SBR, Neoprene, and EPDM:

- High oxygen index values for efficient flame retardancy
- Highly effective plasticization
- Superior thermal and color stability
- Low volatility
- Excellent electrical properties

APPLICATIONS:

Uniplex FRP-45 is recommended in the following applications:

- Fire Retardant Flexible PVC
- Wire and Cable Insulation
- Film and Sheeting
- Carpet Backing
- Coated Fabrics
- Wall Coverings
- Adhesives and Coatings

SPECIFICATIONS:

Appearance	Clear, amber liquid
Color, Gardner	3 maximum
Acidity, meq./100 grams	0.05 maximum
Water Content, Karl Fischer	0.1% maximum
Assay, GC (as Di-(2-Ethylhexyl) Tetrabromophthalate)	95% minimum
2-Ethyl Hexanol, GC	0.3% maximum
Tetrabromophthalic Anhydride, GC	0.1% maximum



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TYPICAL PROPERTIES

Specific Gravity	Approximately 1.5
Melting Point	-20°C
Flash Point	> 510°F (COC)

SUGGESTED FORMULATIONS:

Uniplex FRP-45 is used as a total, or partial, replacement for conventional plasticizers, such as Uniplex 546 (Trioctyltrimellitate). The total plasticizer content of polyvinyl chloride compounds should be in the range of 40 - 50 parts plasticizer per 100 parts polyvinyl chloride resin. A typical formulation for wire and cable is:

<u>COMPONENT</u>	<u>PARTS</u>
Polyvinyl Chloride Resin	100
Total Plasticizer	40 - 50
Clay	10
Dibasic Lead Phthalate	5 - 7
Antimony Oxide	2 - 4
Lubricant (Paraffin wax or Stearic Acid)	0.3 - 0.5
Antioxidant	0.2 - 0.4

HANDLING INFORMATION:

Refer to Material Safety Data Sheet Handling Information.

These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use of our products are beyond our control. We recommend that the prospective user determine the suitability of our materials and suggestions before adopting them on a commercial scale. Suggestions for uses of our products should not be understood as recommendations that they be used in violation of any patents.