



Technical Information

Firemaster® 552

Phosphorus-Bromine Flame Retardant

Firemaster 552 is a low viscosity liquid flame retardant for flexible polyurethane foams which is recommended for use in mechanically cooled foams. Firemaster 552's high efficiency as a flame retardant is a result of phosphorus-bromine synergy. It is based on proprietary Great Lakes technology and does not contain PBDE.

Phosphorus-Bromine Flame Retardant
CAS Reg. Number Proprietary

Proprietary Composition

Typical Properties

Appearance	Clear Amber Liquid			
Specific Gravity	1.4			
Bromine Content, %	27			
Phosphorus Content, %	4.3			

Viscosity

Temperature, °C	10	20	30	40
Viscosity, cps	380	170	80	45

Thermogravimetric Analysis (10°C/min under N₂)

Weight Loss, %	5	10	50	95
Temperature, °C	206	222	266	293

Solubility (g/ 100 g Solvent)

Water	<0.1
Dichloromethane	Complete
Methanol	5.5
Toluene	Complete
Methyl Ethyl Ketone	Complete

Firemaster 552 is primarily used in flexible polyurethane foams that are mechanically cooled to reduce polymer degradation. **Firemaster 552** offers the following advantages:

- Does not contain PBDE
- Effective flame retardant, even at low density
- Outstanding foam scorch and cigarette smolder resistance
- Low viscosity, excellent foam processing

The use of proper protective equipment is recommended. Excess exposure to the product should be avoided. Wash thoroughly after handling. Store the product in a cool, dry, well-ventilated area away from incompatible materials. Unless stated, proper storage will permit usage of the product for 6 to 12 months from the date of receipt. For additional handling and toxicological information, consult the GLCC Material Safety Data Sheet.

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