



Technical Information

Firemaster[®] 550

Phosphorus-Bromine Flame Retardant

Firemaster 550 is a low viscosity liquid flame retardant for polyurethane foams and other applications, which require a liquid product. Firemaster 550'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 brominated diphenyl ethers.

Phosphorus-Bromine Flame Retardant

CAS Reg. Number Proprietary

Typical Properties

Appearance	Clear Amber Liquid
Bromine Content, %	27.1
Phosphorus Content, %	4.3

Viscosity

Temperature, °C	10	20	30	40	
Proprietary Composition	Viscosity, cps	420	177	83	47

Thermogravimetric Analysis (10 mg @ 10°C/minute under N₂)

Weight Loss, %	5	10	50	95
Temperature, °C	208	221	263	292

Solubility (g/ 100 g Solvent)

Water	< 0.1	Toluene	Complete
Methylene Chloride	Complete	Methyl Ethyl Ketone	Complete
Methanol	5.7		

Firemaster 550 can be used in both HR and conventional polyurethane foams and offers the following advantages:

- Not based upon diphenyl oxide
- Even distribution throughout foam
- Reduces compression set and increases IFD
- Outstanding resistance to foam discoloration during production
- Increased compatibility with polyols
- Eliminates center softening in HR foams
- Produces white foams

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.