

## Phosphate Flame Retardant WSFR- OP-1

Product Name:	WSFR-OP-1
Chemical Name:	Oligomeric phosphate ester
Typical properties	
Phosphorus content (wt. %)	19
Flash point (seta CC)°C	205
Water solubility	Miscible
Specification:	
Appearance	Colorless to yellowish transparent liquid
Color (APHA)	≤400
Viscosity (25°C, mPa⋅s)	1500-3500
Acid Value (mgKOH/g)	≤2.0
Water content (wt. %)	≤0.1
Density (25°C, g/cm <sup>3</sup> )	1.30±0.05

## **Application:**

WSFR-OP-1 is a high efficiency halogen free flame retardant additive for flexible polyurethane foams. It is a high molecular weight oligomeric phosphate ester which has excellent heat ageing performance, low volatile, low odor. It is particularly recommended for automotive and furniture applications where resistance to migration upon ageing is a requirement of the flammability standards used. And it is also typically recommended for the production of flame retardant foams required to resist ignition from low intensity flame sources as described in Federal Motor Vehicles Safety Standard No.302 and also to meet California Bulletin 117 requirements. Owing to its high efficiency, its dosage required for the same flame retardancy is almost 50% lower than traditional flame retardants.

## Storage and Packaging:

WSFR-OP-1 is very hydroscopic. Please keep containers tightly closed and prevent the ingress of moisture or other forms of contamination. Store in dry ventilated place. 250kg net drum.

## **Contact Info**

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