Fyrolflex RDP-HP™

ICL Industrial PRODUCTS

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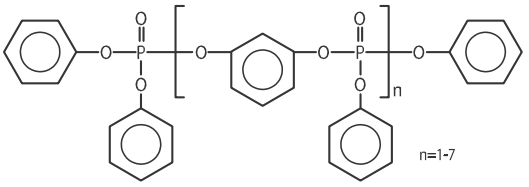
Flame Retardants

Chemical name: Resorcinol bis (diphenyl phosphate)
Formula: x
CAS Number: 57583-54-7



General & Use:

Fyrolflex® RDP, an oligomeric phosphate ester flame retardant, is designed for use in engineered resin applications such as polyphenylene oxide alloys and PC/ABS. Because of its low volatility and high heat stability, this non-halogen flame retardant can tolerate high temperature processing required of many engineered resins.

In addition to its FR characteristics, Fyrolflex® RDP demonstrates improved processing characteristics in a number of thermoplastics including ABS and HIPS that benefits designs like thin wall moldings, and other high-performance, high flow plastic applications. Typically, RDP is used at 8 to 15 phr to provide flame retardancy in a variety of resins. When used as a processing aid, 1 to 3 phr of RDP is added to thermoplastics to improve melt flow characteristics with minimal loss of dimensional stability. Compared to other non-halogen FRs (phosphate esters), Fyrolflex® RDP is relatively stable with low volatility, well within the processing parameters of most engineered plastics (onset decomposition +300° C).

Fyrolflex® RDP also has the advantage over other bis-phosphates with its low viscosity. This allows for ease of handling and better and safer management of resources (lower heat storage). Because the reason to use flame retardants is to effect flame retardancy, Fyrolflex® RDP, on a pound for pound basis, has a higher phosphorus content than bis-phenol A bis phosphates which means lower use levels.

For health & safety matters please refer to MSDS.

Typical Properties:

Physical appearance	CLEAR TRANSPARENT LIQUID
Phosphorus content wt. %	10.7
Specific gravity 25°C/25°C	1.318
Density @ 25°C lbs/gal	10.83
Density @ 25°C kg/m³	1.298
Viscosity @ 25°C mPa.s	600
Acidity mg KOH/g	0.12 max
Water content wt. %	0.10 max
Color APHA	<=100
Pour Point °F	10
Pour Point °C	-12
Boiling Point °F	>572
Boiling Point °C	>300
Solubility (water)	Insoluble
Refractive Index (@ 20°C)	1.5773

Thermogravimetric Analysis (10° C/min N_2):

Weight Loss, (%)	°C
2	288
5	325
10	360

Packaging:

Available in bulk tank trucks, isocontainers, 2,800 lb totes, and 590 lb drums.

For more information Please Contact Us.

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Visit our Website: www.icl-ip.com

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For more information about our products and to place an order, please contact one of our regional sales offices.

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