

Fyrolflex RDP-HP

Chemical name: Resorcinol bis (diphenyl phosphate)

CAS #: 57583-54-7

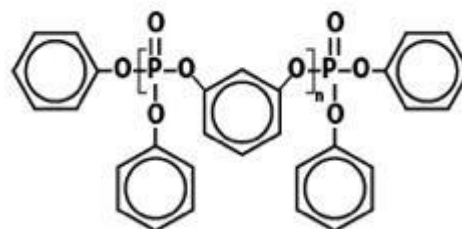
Overview

Fyrolflex® RDP-HP is a high purity oligomeric phosphate ester flame retardant with low triphenyl phosphate content. In addition to low TPP content it also has very low phenol (typically below 50 ppm) and water content. Fyrolflex® RDP-HP 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-HP 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-HP 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-HP 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-HP is relatively stable with low volatility, well within the processing parameters of most engineered plastics (onset decomposition >330° C).

Fyrolflex® RDP-HP 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). Fyrolflex RDP-HP has higher phosphorus content than bis-phenol A bis phosphates which means lower use levels.

Flame Retardants®



Typical Properties:

Physical appearance	Clear, transparent liquid
Phosphorus content wt. %	10.7
Specific gravity 25°C/25°C	1.30
Density @ 25°C lbs/gal	10.85
Density @ 25°C kg/m ³	1300
Viscosity @ 25°C mPa.s	575
Acidity mg KOH/g	max. 0.12
Water content wt. %	max. 0.1
Color APHA	max. 100
Pour Point °C/°F	-9/16
Refractive Index @ 20°C	1.478
Triphenyl phosphate wt. %	max. 0.1

Thermogravimetric Analysis

(10°C/min. in nitrogen):

2% wt. loss 335°C

5% wt. loss 356°C

10% wt. loss 374°C

Safety & Handling

Consult the Safety Data Sheet for this product.

Shipping Information

Available in bulk tank trucks, isocontainers, IBCs of 1270 Kg and drums of 268 Kg.

Visit our Website: www.icl-group.com

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

Head Office

ICL-IP Ltd.

E-mail: frinfo@icl-group.com

North America and Mexico

ICL-IP America Inc.

E-mail: fr.nam@icl-group.com

Asia Pacific China

ICL-IP China

E-mail: fr.china@icl-group.com

Other Asia Pacific

ICL-IP Asia Ltd.

E-mail: fr.asia@icl-group.com

Europe

ICL-IP Europe B.V.

E-mail: fr.europe@icl-group.com

South America

ICL-IP Brasil Ltda.

E-mail: fr.sam@icl-group.com

Japan

ICL-IP Japan Ltd.

E-mail: fr.japan@icl-group.com

Other parts of the World

E-mail: frinfo@icl-group.com

All information concerning this product and/or suggestions for handling and use contained herein are offered in good faith and are believed to be reliable as of the date of publication. However, no warranty is made as to the accuracy of and/or sufficiency of such information and/or suggestions as to the merchantability or fitness of the product for any particular purpose, or that any suggested use will not infringe any patent. Nothing herein shall be construed as granting or extending any license under any patent. Buyer must determine for itself, by preliminary tests or otherwise, the suitability of this product for its purposes, including mixing this product with other products. The information contained herein supersedes all previously issued bulletins on the subject matter covered.