

Phosflex® 390

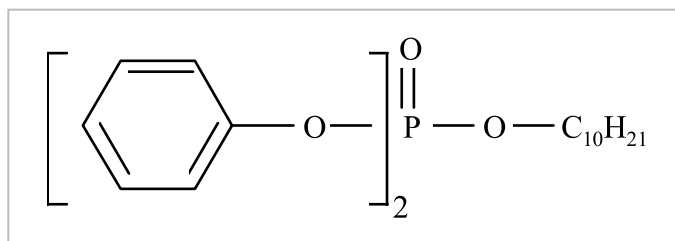
Phosflex®
Flame Retardant Plasticizers

Chemical Name: Isodecyl diphenyl phosphate ester

CAS #:

Isodecyl diphenyl phosphate 29761-21-5

Triphenyl phosphate 115-86-6



Overview

Phosflex® 390 is isodecyl diphenyl phosphate made from synthetic feedstock. It is a highly efficient plasticizer for PVC, with very good low temperature flexibility, and excellent solvating properties for fast fusion.

One of the unique characteristics of Phosflex® 390 is its ability to reduce flammability while also reducing smoke. Typically when flame retardants are used, the combustion efficiency of the compound is decreased and as a result, smoke (incomplete combustion particles and gases) increase. Phosflex® 390 does both exceeding well in many types of polymer systems, especially flexible vinyl and vinyl alloys.

Phosflex® 390 has excellent compatibility in PVC and other plastics. Formulated correctly, this product performs well in vinyl composites for outdoor applications where exposure to UV irradiation and weathering is critical. Phosflex® 390 has been found useful in FR foamed vinyl and vinyl alloys (PVC/nitrile rubber), calendared sheet goods, vinyl wire and cable

and outdoor PVC applications. In certain elastomers, Phosflex® 390 can be useful as a solvator to improve the tactile feel of the rubber composites.

Typical Properties:

Physical appearance	Clear, transparent liquid
Phosphorus content wt. %	7.9
Specific gravity 20°C/20°C	1.070
Density @ 20°C lbs/gal	8.9
Density @ 20°C kg/m³	1070
Viscosity @ 25°C mPa.s	26
Acidity mg KOH/g	0.10
Water content wt. %	0.10
Color APHA	<100

Thermogravimetric Analysis

(10°C/min. in nitrogen):

2% wt. loss	204°C
5% wt. loss	221°C
10% wt. loss	234°C



Safety & Handling

Consult the Safety Data Sheet for this product.

Shipping Information

Available in bulk tank trucks, isocontainers, 2,300 lb totes, and 480 lb drums.

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-ip.com

Europe

ICL-IP Europe B.V.

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

North America and Mexico

ICL-IP America Inc.

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

South America

ICL-IP Brasil Ltda.

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

Asia Pacific China

ICL-IP China

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

Japan

ICL-IP Japan Ltd.

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

Other Asia Pacific

ICL-IP Asia Ltd.

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

Other parts of the World

E-mail: frinfo@icl-ip.com

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