



# Plasticizer WVC 3800

## KEY FEATURES:

- High compatibility with a broad range of polymers
- High transparency
- Low water content and hydrophobicity
- Exceptionally low VOC content





# Plasticizer WVC 3800

## PRODUCT DESCRIPTION

**Plasticizer WVC 3800** is a clear, odorless liquid that mixes well with organic solvents but not with water. **WVC 3800** contains up to 1.5% monoester and is stabilized to prevent the formation of peroxide. It mixes well with PVC and PVB and, thanks to its low viscosity, it provides exceptionally good processability. The low vapor pressure and good ability to mix with other plasticizers such as DOP and DOTP contribute to an optimal result. **WVC 3800** is characterized by a high resistance to hydrolysis.

## APPLICATIONS

**WVC 3800** is used in films for laminated safety glass and permanent encapsulation of solar cells. It is a valuable additive to PVB, where users appreciate key properties such as compatibility with polyvinyl butyral, high transparency, high boiling point, low water content and hydrophobicity.

The product is also used as an additive in formulations for water-based adhesives, paints and coatings. Here it has a positive effect on gloss, open time and rheological properties. Particular note should be made of its exceptionally low VOC content. The plasticizer is also used in many versatile plastisol applications, such as PVC coverings, tubing and textile coatings or in silk-screen printing.

## GUIDELINES

**Plasticizer WVC 3800** is not to be regarded as a hazardous substance and does not require classification and labeling according to Council Directive 67/548/EEC on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labeling of dangerous substances.

## COUNCIL DIRECTIVES FOR VOLATILE ORGANIC COMPOUNDS (VOC)

- Council Directive 1999/13/EC on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations.
- Directive 2004/42/CE on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC.

The VOC content is measured according to EPA Method 24 (Determination of Volatile Matter Content, Water Content, Density, Volume Solids and Weight Solids of Surface Coatings), which is limited to < 0.1%.

## TYPICAL PROPERTIES

	Unit	
Molar mass	g/mol	402.56
Boiling point at 1013 mbar	°C	381
Melting point	°C	-70
Density at 20°C (DIN 51 757)	g/cm <sup>3</sup>	0.966
Refractive index n <sub>D</sub> at 20°C (DIN 51 423, part 2)		1.444 – 1.446
Viscosity at 20°C	mPa · s	16.4
Vapor pressure at 20°C	hPa	< 0.01
Volatile organic compounds (VOC, EPA-24)	%	< 0.1