

# **BYK-1790**

Silicone-free, polymer-based defoamer for solvent-free, radiation-curing wood and industrial coatings, printing inks and adhesives. Suitable for pigmented and unpigmented coating systems.

## **Product Data**

#### Composition

Mixture of foam-destroying polymers, silicone-free

## **Typical Properties**

The values indicated in this data sheet describe typical properties and do not constitute specification limits.

Density (20 °C): 0.85 g/ml Non-volatile matter (10 min., 150 °C): 100 %

### **Food Contact Legal Status**

For the current food contact legal status, please contact our product safety department or visit www.byk.com for further information.

# **Applications**

## **Coatings and Printing Inks**

### **Special Features and Benefits**

BYK-1790 is silicon-free and is recommended for solvent-free, radiation-curing (UV and ESH) coating systems (pigmented and unpigmented), printing inks and overprint varnishes. The high efficiency of the defoamer is not impacted by pigments, fillers, wax additives or matting agents.

### **Recommended Levels**

0.1-0.7 % additive (as supplied) based upon the total formulation.

The above recommended levels can be used for orientation. Optimal levels are determined through a series of laboratory tests.

# **Incorporation and Processing Instructions**

Due to its high incompatibility, the defoamer must be incorporated at high shear forces (in the mill base) to ensure good distribution. Otherwise defects may occur in the system.

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#### **Adhesives & Sealants**

### **Special Features and Benefits**

BYK-1790 is silicon-free and is recommended for solvent-free, radiation-curing (UV and ESH) adhesives (pigmented and unpigmented) as well as for reactive polyurethane hot melt adhesives. It has no negative effect on the adhesive properties of the adhesives. In radiation-curing formulations, BYK-1790 is ideal for universal use in acrylate based binders. It prevents foaming in the manufacture of reactive polyurethane hot melt adhesives even at high viscosity. Significantly shorter evacuation times lead to an increase in the efficiency of production due to the additive.

#### **Recommended Levels**

0.1-0.7 % additive as supplied based on the total formulation.

The above recommended levels can be used for orientation. Optimal levels are determined through a series of laboratory tests.

### **Incorporation and Processing Instructions**

Due to its high incompatibility, the defoamer must be incorporated at high shear forces (in the mill base) to ensure good distribution. Otherwise defects may occur in the system.