

Data Sheet Issue 03/2014

# **BYK-P 9904**

Processing additive/compatibilizer for hydrocarbon or HFC-blown polyurethane rigid foams and flexible foams based on polyol blends. In rigid foams, the additive supports faster emulsion formation between the blowing agent and polyol; in flexible foams, it improves the compatibility between the polyols.

## **Product Data**

## Composition

Solution of a high molecular weight block copolymer with basic groups

## **Typical Properties**

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

Amine value: 17 mg KOH/g Hydroxyl number: 75 mg KOH/g Density (68 °F): 9.43 lbs/US gal

Flash point: 244 °F Viscosity (68 °F): 6000 mPa·s

## **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.

#### **Storage and Transportation**

Separation or turbidity may occur at temperatures below 5 °C (41 °F). Warm to 20 °C (68 °F) and mix well.

## **Applications**

#### **Ambient curing resin systems**

## **Special Features and Benefits**

When used with rigid foams, BYK-P 9904 supports faster emulsion formation between the blowing agent and the polyol during the foaming process. The smallest droplets are stabilized better and phase separation of the incompatible components is prevented. This results in a homogenous distribution of the raw materials and a more even distribution of the physical properties. The finer emulsion ultimately results in a finer cell structure. In flexible foams, it improves the compatibility between polyols, particularly in the case of polyether and polyester polyol blends.

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#### **Recommended Use**

BYK-P 9904 is used as a processing additive in the production of hydrocarbon or HFC-blown polyurethane rigid foams as well as in the production of flexible foams based on polyol blends.

## **Recommended Levels**

0.2-2 % additive (as supplied) based on the prepolymer or the polyol blend.

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

#### **Incorporation and Processing Instructions**

The additive is preferably incorporated with the main components, to achieve an optimum droplet distribution of the incompatible components.







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