

### TYPE

Carbamic resin based on butylurethane and formaldehyde

### FORM OF DELIVERY (f.o.d.)

Slightly yellow, high viscous liquid with characteristic odour

### SPECIAL PROPERTIES AND USES

**Plasticizing component and compatibility promoter for thermoplastic backbone coating resins (e. g. nitrocellulose, PVC copolymers, cyclized rubber, PVB), alkyd/amino stoving enamels and acryl-isocyanate combinations.**

### PRODUCT DATA

#### Determined per batch:

#### Dynamic Viscosity (Ubbelohde) DIN 53177

dynamic viscosity	[mPa.s]	3500 - 13500
(23 °C)		

#### Non-Volatile Matter DIN EN ISO 3251

non-volatile matter	[%]	> 95
(1 h; 125 °C; 2 g; toluene)		

#### Colour Scale (Hazen) DIN EN ISO 6271-1

Hazen colour value		<= 300
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#### Not continually determined:

#### Density (Liquids) DIN EN ISO 2811-2

density	[g/cm³]	1,10
approx.		
(20 °C)		

#### Flash Point (Pensky-Martens) DIN EN ISO 2719

flash point	[°C]	> 150
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### COMPATIBILITY AND DILUTABILITY

Resamin HF 480 is compatible with most of the synthetic resins used in the coating industry. Resamin HF 480 is unlimited dilutable with aromatic hydrocarbons, esters, glycolethers, ketones and chlorinated hydrocarbons. Resamin HF 480 is largely dilutable with lower alcohols and aliphatic hydrocarbons.

### PROPERTIES AND USES

Resamin HF 480 has the properties of a plasticizer as well as that of a soft resin. It contains no organic solvents. It is light-fast and heat resistant and stable against hydrolysis.

Resamin HF 480 is mainly used as a soft resin in nitrocellulose lacquers for the coating of wood and paper to improve flexibility, adhesion, gloss and outdoor durability.

Resamin HF 480 can also be used in stoving systems based on alkyd/amino resins or in coatings based on thermoplastic resins to improve flexibility and adhesion. In combination with thermoplastic resins like Hostaflex (PVC) or Butvar (poly vinyl butyral), pigmentation and gloss development are improved as well.

### PROCESSING

Because of its excellent compatibility with other binders, there are hardly any problems in processing or milling with pigments and fillers. The dosage of Resamin HF 480 in nitrocellulose lacquers is from 20 % (for paper coatings) to 40 % (for wood coatings), calculated onto solid nitrocellulose. In stoving systems and washprimers, the dosage should not exceed 5 % (on total solids) in view of its strong plasticizing action and threat of surface tack. In most coating formulations, e. g. wash-primers based on Butvar, a dosage of 0.5 to 2 % is effective as compatibility promoter. Opalescence resulting from other binders or solvents will disappear if Resamin HF 480 is added.

### SHELF LIFE

Standard Shelf Life is 1080 days from the date of manufacturing.  
For products still in allnex possession allnex may extend the expiration date of a batch upon re-testing by QC.

### STORAGE CONDITIONS

Store in a cool, dry, well ventilated place and keep container tightly closed.

Product may develop a turbid appearance during storage based on a solubility phenomenon that is in the nature of the product. Gradual warming to 60 °C will return the material to its as-produced appearance.