

GP-5132

Water-Soluble Urethane Acrylate

INTRODUCTION

GP-5132 resin is a 100% high-functionality water-soluble polyurethane UV oligomer with good solubility in pure water. Contains no monomers or any volatile VOC organic solvents. Excellent storage stability, no precipitation, delamination, demulsification and other defects. The paint film is hard and wear-resistant, has high gloss and good fullness, and has excellent resistance to chemical erosion. Can be applied to metal, plastic, paper, wood and other materials. It also has good compatibility with conventional oily resins, and the formula can be adjusted flexibly. It can be used for spraying, roller coating, curtain coating, printing and other processes. It maintains the high efficiency of oil-based products and the environmental protection and safety features of water-based UV.

TYPICAL VALUES

T _g (°C)	75
MW(GPC)	2200
Elongation at Break%	15
Colour, Gardner	2
Pondus Hydrogenii Value	7-9
Viscosity at 25°C,mPa.s	25000
Specific Gravity	1.12
Effective content	100%

APPLICATION

UV ink : GP-5132 is recommended for use in areas with higher requirements for high decorative properties and chemical resistance. High hardness and friction resistance, the cured film has good water resistance. Faster curing reaction speed and excellent overall performance

UV coating : In vacuum electroplating UV spraying, nano-spraying, decorative and protective coating applications for plastics, metals and wood. It has good adhesion to metal coatings, good sealing properties as a wood basecoat, and excellent fullness and scratch resistance when applied as a topcoat.

INTERMISCIBILITY

monomer: It is recommended to cooperate with hydrophilic monomers, such as monofunctional monomers (HEMA, HEA, HPA) and NVP vinylpyrrolidone to enhance the adhesion performance of the product. The use of 15EOTMPTA ethoxylated monomer can enhance the strength and toughness of the coating film and greatly improve the resistance to chemical erosion.

Solvent : It has good solubility with alcohols and alcohol ether solvents, and can be dissolved in a mixed solution containing alcohol ether and water at a ratio of 100:100.

Resin and pure water can achieve a high solubility of 100:70

polymer: It can be well miscible with oil-soluble polyester, epoxy, and polyurethane acrylate to meet the needs of formula preparation. The increase in the content of alcohol and ether solvents will enhance the solubility with oily resins.

Auxiliary: Surface additives such as wetting and leveling are crucial to the appearance and adhesion of the paint film. Tego245 wetting agent is recommended to reduce the adhesion impact on upper layer plating and recoating.

packing: 20kg plastic barrel , 200kg drum

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