

Hydrophobic Modified Ethoxylated Urethane

## Technical Data Sheet

Name: Vesmody® U604  
Revision Date: 2018-01-11

NO.AA\_009  
Version: 1.1

### Product Description

**Vesmody® U604** is a nonionic urethane rheology modifier, a suitable thickening agent for any waterborne painting system, especially for architectural coating and industry coating. Vesmody® U604 is an efficient pseudoplastic PU thickener, it allows the formulation of paints with an excellent balance between flow and sag. It can be used as a cothickener with Vesmody® U300 in many types of formulations for attaining a desired balance of low and high shear viscosities. Vesmody® U604 has excellent stability to colorant in formulations; it is eminently suitable in pigmented paint. Solvent: water. Biocide: (CMIT/MIT = 3:1) 10 ppm, MIT 200 ppm.

### Properties

1. Tin-free, Solvent-free, Apeo free
2. Ultra-Low odor, low VOC
3. Excellent medium-shear viscosity thickening efficiency
4. Excellent stability to colorant
5. Excellent water and alkali resistance
6. Excellent leveling and sag resistance
7. Use over a wide pH range

### Characteristic data \*

Property	Value	Unit	Method
Appearance	Translucent to slightly milky-white liquid		
Weight Solids	24-26	%	WHPU/T011-571-2017 (4cm,150°C,20min)
Active solids content	14-16	%	
pH	6.0-7.0		GB 6920-1986, 25°C
Viscosity	12000-17000	mPa·s	Brookfield RV, 5#/12rpm,

25°C

---

Density	1.04	g/cm <sup>3</sup>	GB/T 4472-2011, 25°C
Chemistry	HEUR		

---

\*These properties are typical but do not constitute specifications.

## Instructions for use

**Vesmodity® U604** is supplied as a pourable liquid, it is easy to use and can be added in any formulation time directly or after dilution. (Recommended diluted by 2-4 times water before use). Depending on the character and amount of the emulsion as well as filler and pigment, the amount of the addition is variable, probably 0.1-2.0% by weight of the formulation in its supplied form. The exact amount required in each formulation should be determined by pre-trials.

## Storage

The product should be stored in dry conditions above 5°C and below 35°C with the integrity of the packaging, and prevent direct sunlight. The validity of this product is for 12 months, performance assessment is recommended before use after shelf life. The product should be protected from freezing during storage. After opening the packing, suggested to use up one time.

**Disclaimer:** Wanhua Chemical Group Co., LTD. recommends that any customers of this material should check with Materials Safety Data Sheet (MSDS) for details about safely handling this material. We also suggest that you contact the suppliers of any other materials used in our recommended formulations and suggestions for appropriate health and safety regulations prior to use. The information contained herein is believed to be reliable. However, nothing in this technical sheet should be considered as a representation of warranty, express or implicit, regarding the product characteristics, application, quality, safety, merchantability or fitness for a particular purpose. Nothing contained herein is to be considered as permission, recommendation, nor as an inducement to practice any patented invention without permission of the patent owner.