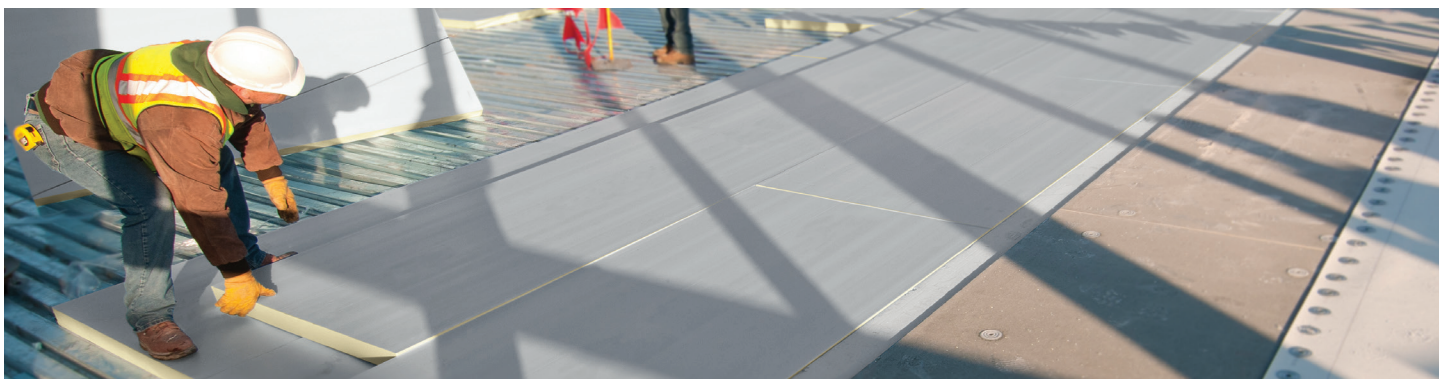




# High-Performance VORASURF™ 504 Surfactant Boosts Foam Insulation System Efficiency



VORASURF™ 504 Surfactant is a highly efficient, non-silicone organic surfactant that enables enhanced energy efficiency in polyurethane (PUR) and polyisocyanurate (PIR) foam insulation systems. Typical applications for the product include foam core laminate, pour-in-place insulation and spray insulation polyol blends. Compatible with polyester and polyether polyol formulations, VORASURF 504 Surfactant makes the mixing of polyols and blowing agents easy, maintains the blowing agents in the emulsion or solution and renders excellent emulsion stability. Formulated and processed properly, systems with VORASURF 504 can achieve higher foam yield and higher compressive strength than with other types of surfactants.

Contact Dow to optimize your process to get the most out of VORASURF 504's many advantages proven through years of experience:

- **Easier mixing** – VORASURF 504 is an excellent emulsifier and requires minimal energy to form an emulsion solution of various polyols and hydrocarbon
- **More stable emulsion** – Emulsion with VORASURF 504 lasts much longer than with other surfactants and therefore provides manufacturing flexibility
- **Higher yield** – Systems with VORASURF 504 yield more foam and therefore give better utilization of chemicals
- **Increased compressive strength** – Foam with VORASURF 504 can achieve higher compressive strength at the same density
- **Improved synergy** – Vorasurf 504 can be pre-blended with polyester or polyether polyols to improve their compatibility in various systems and enhance their performance. It can also be used with other silicone surfactants in certain systems for improved performance.
- **Safe** – No special EH&S equipment is needed to prevent gases from being released to the environment, unlike other silicone surfactants

## Typical Properties<sup>1</sup>

Property	Value
Appearance	Clear to slightly hazy
State at room temperature	Liquid
Density at 77°F (lbs/gal)	8.32
Water, max. (%)	0.1
Flash point (PMCC), (°F)	>500

<sup>1</sup>Specifications are revised periodically. Check with your sales representative for any recent updates.

## Viscosity Profile

Temperature (°F)	Viscosity (cPs)
68	4,500
77	3,570
100	1,600
150	450
210	165

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For more information and product samples, contact us at your convenience:

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