PURE-THIX 1442

Nonionic associative Thickener for Water Phases in Cosmetic Applications

INCI Name
Polyether-1

Product Description
PURE THIX-1442 is a non-ionic hydrophobic modified polymer flake. It forms clear aqueous solutions and is designed especially for personal care formulations. PURE THIX-1442 provides pseudoplastic flow behavior by associative thickening with other formulation ingredients.

Typical Properties
The values indicated in this data sheet are typical and do not constitute specification limits.

Form:	Flake
Color:	White
Viscosity:	2200 - 3400 cP
Melting Range:	50.0 - 60.0°C

Recommended Use

Application areas:	Personal Care:	Cream and Lotion Bath and Shower Gel Sunscreen Product Hair Care Product Hair Styling Product
	Color Cosmetics:	Liquid Make-up

Incorporation and Processing Instructions
PURE THIX-1442 can be added to the water phase of the formulation or at the end of the formulation before cool down. The associative thickener polymer can be mixed into water at room temperature, but heating up to 60 °C speeds up the incorporation without significant loss of viscosity building properties. Moderate mixing is recommended to avoid air entrapment.

PURE THIX-1442 Processing Parameters: 1 % in deionized water - low shear:

Temperature (°C)	88	60	40	24
Time (minutes)	30	60	180	540
Viscosity (cps)	40	60	65	75

Recommended Levels
Depending on the rheological performance desired in the formulation, typical use levels of PURE THIX-1442 are 0.4 - 2.5 %.
PURE THIX-1442 at 2 % will gel water to 15600 cps, and 3 % will gel water to 191300 cps.

These levels are suggested as guideline; optimum levels can be determined by laboratory tests.

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Special Note
PURE THIX-1442 has a very good salt tolerance to at least 4 % in the formulation and does not require neutralization. The achieved viscosity is pH independent in the range from pH 5.5 and higher. Surfactants can affect the viscosity of formulations thickened with PURE THIX-1442. While the effects are likely to be formulation dependent, probable outcomes can vary with the type and loading level of surfactant. However, during formula optimization, positive rheological improvements often are possible by selection of surfactant type and concentration.

Storage and Transportation

PURE THIX-1442 should be stored dry in unopened, original packaging at temperature between 0°C and 30°C.

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