

Waterless Hand Cleaner with Abrasive No. 477

		Wt.%
A	VEEGUM® Ultra Magnesium Aluminum Silicate	1.5
	VANZAN® NF Xanthan Gum	0.5
	Water	42.3
B	Oleic Acid	9.0
	Mineral Oil	9.0
C	Water	2.0
	Potassium Hydroxide	0.7
D	C11-12 Isoparaffin (Isopar® K ¹)	25.0
E	Polyethylene Beads (A-C 9-A ²)	10.0
F	Preservative, Fragrance	q.s.

Procedure: While heating the water to 75°C, slowly add the **VEEGUM® Ultra** and **VANZAN® NF** sequentially or as a dry blend to the water agitated at maximum available shear. Mix until fully hydrated. Maintain the water phase at 75°C. Blend the Part B oil phase ingredients and heat to 75°C. Add the oil phase to the water phase with good agitation; mix until uniform. Cool while mixing. Add the Part C solution of potassium hydroxide in water when the emulsion is 45°C. Continue to cool while mixing and add Parts D, E and F when the emulsion is <35°C.

RAW MATERIAL SUPPLIERS¹ExxonMobil Chemical, Houston, TX²Honeywell Specialty Wax & Additives, Morristown, NJ**TRADEMARKS****VEEGUM** and **VANZAN** are registered trademarks of Vanderbilt Minerals, LLC.

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