

Aristoflex AVC - a new pH stable polymer for gels and O/W emulsions	Löffler, M, Miller, DJ;	SÖFW-Journal	<u>128</u> , 46-52 (2002)
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Ammonium Acryloyldimethyltaurate/VP Copolymer (Aristoflex® AVC) is a novel synthetic polymer used as gelling agent for aqueous systems and thickener/stabiliser for oil-in-water emulsions. O/W emulsions may be formulated either by combining it with conventional emulsifiers or by using it as an emulsifier/thickener to give surfactant-free recipes known as cream gels.

Emulsion rheology has been studied as a function of polymer concentration. Above a certain polymer concentration emulsions and cream gels show a yield stress. The yield stress, which prevents creaming, plays an important role in the stability. Cream gels have higher yield stresses and larger droplet sizes than conventional emulsions. The relevance of the rheology to skin feel is discussed.

Ammonium Acryloyldimethyltaurate/VP Copolymer is easy to use as it is pre-neutralised. Characteristics which are of particular interest to the cosmetics formulator include: insensitivity to pH over the pH 4 - 9 range, stability against degradation by high shear, stability towards UV light and compatibility with polar organic solvents. Cream gels based on Ammonium Acryloyldimethyltaurate/VP Copolymer break differently on the skin, opening doors to novel galenic forms with new sensory properties.