

---

**Technical Datasheet**

---

January 2010

---

30482059 Salcare SC 91\_TDS

---

# Salcare<sup>®</sup> SC 91 Rheology Modifier

® Registered trademark of BASF group

<b>Characterization</b>	SALCARE SC91 is an anionic acrylic copolymer dispersed in medicinal grade white oil.	
<b>INCI name</b>	Sodium Acrylates Copolymer (and) Mineral Oil (and) PPG-1 Trideceth-6	
<b>Applications</b>	SALCARE SC91 is designed for use in a range of applications in the cosmetics industry. Typically it is used to enhance the performance of skin and hair care formulations. A typical application level in a skin cream is around 2% polymer as supplied.	
<b>Performance Highlights</b>	<p>Allows direct addition of thickener at any stage of manufacture. Requires no pre-mixing or special storage facilities. Can be added to cold aqueous systems, thickens simply by agitation.</p> <p>Aids suspension and stabilisation of organic and inorganic pigments.</p> <p>High thickening efficiency, and hence low usage levels in many applications.</p> <p>Gives good uniform performance, this reproducibility is unattainable with natural gums.</p>	
<b>Prime Functions</b>	<p>Thickener</p> <p>Suspending / stabilising agent</p> <p>Gelling agent</p> <p>Promotes good spreading characteristics</p> <p>Opacifier</p>	
<b>General Properties</b>	Nature	Non-aqueous liquid dispersion of a polymer
	Appearance	Mobile liquid
	Color	Off-white
	Odor	Slight Acrylic
	Gravimetric Solids %	50
	Viscosity as supplied (25°C)(RVT/2/50)	250 cPs
	Viscosity 2% solution (25°C)(RVT/6/20)	30000 cPs
	pH of 2% solution (25°C)	7.0
	Boiling Point	>100°C
	Freeze/Thaw Stability	Stable
	Density @ 20°C	1.18 g/cm <sup>3</sup>
<b>Formulating</b>	SALCARE SC91 is designed for use in the presence of nonionic and anionic ingredients. It is particularly effective when formulating around pH 5-9	
<b>Oils, Silicones and Emollient Esters</b>	SALCARE SC91 can be used in formulations containing a wide range of these ingredients up to a total of 35%. This enables the simple formulation of skin creams without heating or the use of further emulsifiers.	
<b>Alcohol</b>	Formulations containing up to 50% denatured ethanol can be successfully thickened using SALCARE SC91. A typical application of this type of product could be a two in one moisturizer and toner.	
<b>UV Absorbers</b>	A range of anionic and nonionic UV absorbers can be used in products thickened with SALCARE SC91.	
<b>Versatility</b>	<p>SALCARE SC91 is designed in a concentrated liquid form which is freeze thaw stable.</p> <p>SALCARE SC91 allows the formulator to eliminate several stages from the normal manufacturing procedure. SALCARE SC91 eliminates the need to calculate H.L.B.</p> <p>No need to select specific nonionic emulsifiers in skin care systems.</p> <p>No neutralisation is required to generate viscosity build.</p> <p>Sodium chloride is not required to obtain viscosity build.</p> <p>SALCARE SC91 is designed for use in the presence of anionic and nonionic ingredients.</p> <p>SALCARE SC91 gives good emolliency and rub in characteristics in skin creams and lotions.</p>	

**Thickening Efficiency of SALCARE SC91** SALCARE SC91 is a highly efficient thickener which may be used over a wide pH range.

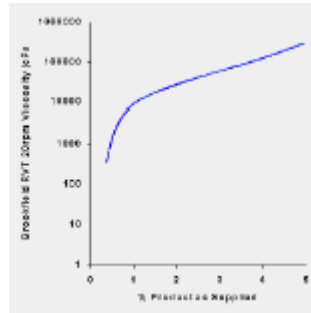
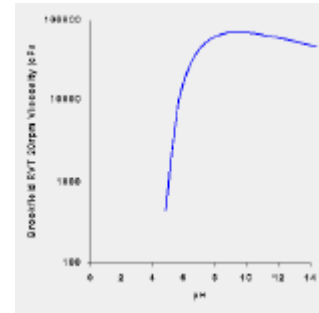
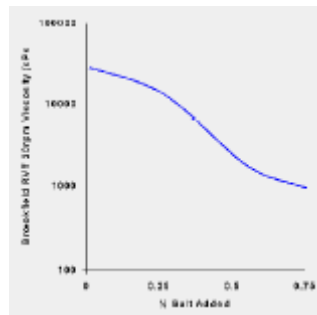


Fig 1: Effect of Concentration on The Viscosity of SALCARE SC91



2% Product as Supplied  
Fig 2: Effects of pH on the Viscosity of SALCARE SC91

The efficiency of SALCARE SC91 is reduced in the presence of monovalent ions. Di and trivalent ions cause a greater loss in efficiency. Any viscosity decrease at higher electrolyte levels can be offset by using a higher concentration of SALCARE SC91.



2% Product as supplied  
Fig 3: Effects of Salt (NaCl) on the Viscosity of SALCARE SC91

**Stability in Anionic Surfactants**

SALCARE SC91 is compatible with anionic surfactants and produces flowable smooth lotions and creams.

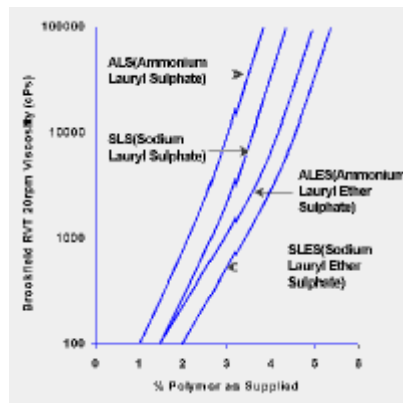


Fig 4: Effects of 10% active anionic surfactant solutions on the viscosity of SALCARE SC91

---

**Typical Applications** SALCARE SC91 will enhance the performance of hair and skin care products

<b>Application Area</b>	<b>Approx. Use Level (% Active)</b>	<b>End Results/Performance</b>
Cosmetic Base	2.0	Base gellant, thickening, moisturising, softening
Hand & Body Lotion	1.5	Thickening, moisturising, softening
Suntan Lotion and Cream	1.5	Thickening, softening, enhanced spreading
Foundations and Make-up Remover	1.75	Thickening, softening

**Assistance can also be offered to solve any formulation problems.**

---

**Packaging** SALCARE SC91 is available in 25 kg and 220 kg drums

---

**Health & Safety** Detailed information on handling and any precautions to be observed in the use of the product described in this leaflet can be found in the relevant Health and Safety information sheet.

---

#### **Note**

This document, or any answers or information provided herein by BASF, does not constitute a legally binding obligation of BASF. While the descriptions, designs, data and information contained herein are presented in good faith and believed to be accurate, it is provided for your guidance only. Because many factors may affect processing or application/use, we recommend that you make tests to determine the suitability of a product for your particular purpose prior to use. It does not relieve our customers from the obligation to perform a full inspection of the products upon delivery or any other obligation. NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE.