

Isethionate Surfactant

Pureact I-78C

INCI Name: Sodium Cocoyl Isethionate

CAS No.: 61789-32-0 EINECS No.: 263-052-5

Pureact I-78C is a mild surfactant specifically designed for use in personal cleansing products. Pureact I-78C is high foaming, nearly salt-free and is resistant to hard and salt water. It is compatible with soap and gives excellent lime-soap dispersibility in order to retard the formation of scum in bar soaps.

Applications

Soap bars

Pureact I-78C is used in "combo bar" applications at levels of 2 – 60% to provide lathering in hard or soft water similar to soaps in soft water. Its dense lather is additive to that of soap. Such mixtures are mild to the skin and are relatively non-drying.

Shampoos

The properties of Pureact I-78C also make it an excellent cleansing agent for shampoos. Besides compatibility with hard water, good cleaning properties, and excellent lathering, Pureact I-78C imparts softness and manageability to hair.

Bubble baths

Pureact I-78C is recommended for use in bubble baths as a high foaming agent. It provides longer-lasting suds, even in the presence of soap, and is mild to skin.

Performance Benefits

Pureact I-78C has limited solubility in soft and hard water. It is optimally stable in aqueous formulations from pH 6-8 at ambient temperature.

Pureact I-78C is naturally derived from coconut and is considered 'readily biodegradable' according to OECD Guidelines.

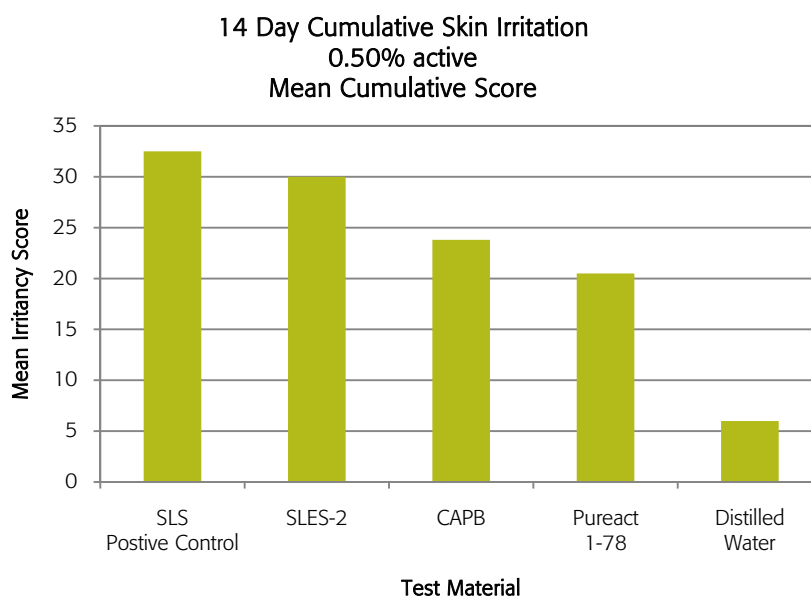


TYPICAL PROPERTIES

Not intended for use in preparing specifications

Appearance	White to off-white noodles
Active content, %	78 minimum
pH, 10% solution @ 35°C	4.7 – 6.0
Moisture, %	0.5 minimum
Free fatty acid, %	14 maximum
Colour, APHA, 5% in 30% n-Propanol 70% distilled water	50 maximum

Pureact I-78C is a novel addition to the Pureact Sodium Cocoyl Isethionate series. Its chemical character is identical to the other isethionates in the series but Pureact I-78C is provided as a 'noodle' consisting of short, variable length cylinders of approximately 1 mm in diameter. The essential benefit of Pureact I-78C is its ease of handling. In this form it is non-dusting, yet possesses an extremely high surface area in order to provide for quick and easy incorporation during manufacturing.



Suggested Formulation

Sulfate-Free Body Wash AC053

Body washe with a dense, luxurious lather and silky smooth after feel

	INCI Ingredients	Tradename (Supplier)	% w/w
A	Water		q.s. to 100
	Trisodium Ethylenediamine Disuccinate	Natrlquest E30 (Innospec)	0.10
	Glycerin		3.00
B	Sodium Methyl Cocoyl Taurate	Pureact WS Conc. (Innospec)	15.00
	Sodium Cocoyl Isethionate	Pureact I-78C (Innospec)	1.50
	Cocamidopropyl Betaine	Mirataine BET C-30 (Rhodia)	12.00
	Dimethicone PEG-8 Benzoate	Finsolv® SLB-201 (Innospec)	0.80
	Methyl Gluceth-20 Benzoate	Finsolv® EMG-20 (Innospec)	0.50
	PEG-150 Pentaerythryl	Crothix (Croda)	2.00
C	Preservative		q.s.
D	Citric acid (50% solution)		q.s. to pH 5.5 – 6.0

Preparation Procedure

1. Dissolve Natrlquest E30 and glycerin in water.
2. Begin heating to 50-60°C and with smooth mechanical agitation, slowly blend each ingredient of phase B, one at a time, into water and mix until completely dispersed.
3. Cool system to 30-35°C, add preservative and mix until uniform.
4. Adjust pH to 5.5 – 6.0 with citric acid solution as needed.

Properties

Appearance	Clear gel
pH	5.5 – 6.0
Viscosity*:	7,000 – 10,000 cps
Stability	Passed 1 month at 45°C, 3 cycles freeze/thaw

*Brookfield DV-E@10 RPM, 25°C, #3 Spindle

For further information, please email your region:

Americas: americas-ac@innospecinc.com Europe, Middle East and Africa: emea-ac@innospecinc.com Asia-Pacific: aspac-ac@innospecinc.com www.innospecinc.com
The facts stated and the recommendations made are based on our own research and/or the research of others, and are believed to be accurate. No guarantee of their accuracy is made, however, and unless otherwise expressly provided by law or in written contract, the materials are sold without warranties, expressed or implied, in particular without guarantee as to suitability for particular purpose. Innospec assumes no responsibility for injury or damage to users or third parties. Recipient agrees to assume all risk and liability whether used singly or in combination with other materials. Issue No. 4 /2010

