

Zinc oxide sunscreen lotion with Eastman AQ™ 38S polymer and Eastman Sustane™ SAIB MCT

Part	Product name	Wt%	Ingredient/INCI name	Manufacturer
A	Deionized water	73.20	Water (aqua)	—
	Zemea®	2.00	Propanediol	DuPont Tate & Lyle
	Glycerin	2.00	Glycerin	Dow
	AMPHISOL® K	2.00	Potassium cetyl phosphate	DSM
	SAFIC® CARE T XGC 80	0.20	Xanthan gum	Safic-Alcan
	CELLOSIZETM hydroxyethyl cellulose (HEC)	0.40	Hydroxyethylcellulose	Dow
	Dermofeel® PA-1	0.10	Sodium phytate	Evonik-Dr. Straetmans
B	Eastman AQ™ 38S polymer (30% solution)	10.00	Polyester-5	Eastman
C	Crodamol™ AB	4.00	C12-15 alkyl benzoate	Croda
	SOFTISAN® 378	1.00	Caprylic/capric/myristic/stearic triglyceride	IOI Oleo
	Lipocol™ SC-20	1.50	Ceteareth-20	Vantage
	Lipocol™ SC-1618	3.00	Cetearyl alcohol	Vantage
	Covi-Ox® T 50	0.50	Tocopherol	BASF
	TEGOSOFT® DCE	1.50	Diethylhexyl carbonate	Evonik Industries
	Cetiol® SN	2.00	Cetearyl isononanoate	BASF
	Cutina® GMS-SE	1.50	Glyceryl stearate SE	BASF
	Eastman Sustane™ SAIB MCT	1.00	Sucrose acetate isobutyrate (and) caprylic/capric triglyceride	Eastman
	Tinogard® TT	0.10	Pentaerythrityl tetra-di-t-butyl hydroxyhydrocinnamate	BASF
	PARSOL® 340	6.00	Octocrylene	DSM
D	PARSOL® MCX	5.00	Phenoxyethanol (and) caprylyl glycol	DSM
	AEROSIL® 300	1.00	Silica	Evonik Industries
	Zinc oxide (micronized)	12.00	Zinc oxide	—
E	KEM DIOL	0.80	Phenoxyethanol (and) caprylyl glycol	Akema

continued on back »

PROCEDURE

1. Weigh out part A into a clean, sanitized stainless steel vessel, and heat it to 80°–85°C.
2. Once at temperature, incorporate xanthan gum and hydroxyethylcellulose. Make sure that part A is completely dispersed before moving on to the next step.
3. Weigh out part C into a clean, sanitized stainless steel vessel, and heat it to 70°–75°C.
4. Once all part A is completely dissolved into the main vessel, add part C and increase the speed.
5. Once homogeneous, keep the temperature and incorporate part B. Mix until homogeneous.
6. Once homogeneous, incorporate part D and increase speed to 1200–1500 rpm.
7. Once homogeneous, start cooling down. Once < 50°C, incorporate part E.
8. Adjust pH* if required.

*pH @ 25°C: 5.5–6.0

EASTMAN
The results of *insight*™

Eastman Corporate Headquarters
P.O. Box 431
Kingsport, TN 37662-5280 U.S.A.

U.S.A. and Canada, 800-EASTMAN (800-327-8626)
Other Locations, +(1) 423-229-2000

www.eastman.com/locations

Although the information and recommendations set forth herein are presented in good faith, Eastman Chemical Company ("Eastman") and its subsidiaries make no representations or warranties as to the completeness or accuracy thereof. You must make your own determination of its suitability and completeness for your own use, for the protection of the environment, and for the health and safety of your employees and purchasers of your products. Nothing contained herein is to be construed as a recommendation to use any product, process, equipment, or formulation in conflict with any patent, and we make no representations or warranties, express or implied, that the use thereof will not infringe any patent. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS AND NOTHING HEREIN WAIVES ANY OF THE SELLER'S CONDITIONS OF SALE.

Safety Data Sheets providing safety precautions that should be observed when handling and storing our products are available online or by request. You should obtain and review available material safety information before handling our products. If any materials mentioned are not our products, appropriate industrial hygiene and other safety precautions recommended by their manufacturers should be observed.

© 2020 Eastman. Eastman brands referenced herein are trademarks of Eastman or one of its subsidiaries or are being used under license. The ® symbol denotes registered trademark status in the U.S.; marks may also be registered internationally. Non-Eastman brands referenced herein are trademarks of their respective owners.