

## Fragrance-free Roll-on Deodorant

The formulation that follows is for a fragrance-free roll-on deodorant containing PolySaf 5600 cationic polymer. As formulated, this deodorant provides these features:

- Excellent deodorancy and odor control
- Light feel
- Fast absorption on skin
- Non-irritating

As a formulation ingredient, PolySaf 5600 provides these benefits:

- Supplied as a formulation-ready liquid emulsion to reduce handling and pre-mixing requirements
- Compatible with a wide range of ingredients

### Demonstration Formulation (#1750602)

No.	Phase	Ingredient	INCI Name	% by Weight	Batch Size, g
1	A	Dow Corning 245 Fluid	Cyclopentasiloxane	46.80	468.00
2	A	Bentone Gel VS-5/PC	Cyclopentasiloxane Disteardimonium Hectorite Propylene Carbonate	13.50	135.00
3	A	Puresyn 4	Hydrogenated C6-14 Olefin Polymers	10.00	100.00
4	A	Asensa CL110	Polyethylene	1.00	10.00
5	B	Cabosil M5	Silica	0.20	2.00
6	C	Reach AZP 908 SUF	Aluminum Zirconium Chlorhydrate	24.00	240.00
7	C	Dipropylene Glycol	Dipropylene Glycol	2.00	20.00
8	D	PolySaf 5600	Butyl Acrylate/Ethyltrimonium Chloride Methacrylate/Styrene Copolymer	2.50	25.00
				100.00	1000.00

### Manufacturing Instructions

- Phase A: Combine Dow Corning 245 Fluid and Puresyn 4; slowly add the mixture into Bentone Gel with agitation; heat to 75°C.  
 Add Asensa to the batch; mix until all dissolved.
- Phase B: Add phase B slowly and mix until dissolved; cool to 45°C.
- Phase C: Add phase C ingredients to the batch; mix until uniform.  
 Homogenize the batch at 4500 rpm for 10 minutes.
- Phase D: Add phase D to the batch; mix until uniform.

### Learn More About PolySaf 5600 Polymer; Request a Sample

For product information or to request samples, contact Lisa Droste of Mallard Creek Polymers at 1-800-547-0622, ext. 1091 or visit [www.polysaf-polymers.com](http://www.polysaf-polymers.com).

The information herein is to assist customers in determining whether our products are suitable for their applications. Our products are intended for sale to industrial and commercial customers. We request that customers inspect and test our products before use and satisfy themselves as to contents and suitability. We warrant that our products will meet our written specifications. Nothing herein shall constitute any other warranty express or implied, including any warranty of merchantability or fitness, nor is protection from any law or patent to be inferred. All patent rights are reserved. The exclusive remedy for all proven claims is replacement of our materials and in no event shall we be liable for special, incidental or consequential damages.

All trademarks or trade names are the property of their respective owners.

Printed in USA  
AGP9785  
Issued 02-2009



14700 Mallard Creek Rd.  
Charlotte, NC 28262  
Phone: 1.800.547.0622  
[www.mcpolymers.com](http://www.mcpolymers.com)