

**ANTIPERSPIRANT WITH D5 REPLACEMENT**

VOV002-78-1

1/15/2009

OBJECTIVE: COMPARE SILWAX D02 AGAINST D5 CYCLOMETHICONE IN A/P STICK

OBJECTIVE -C: COMPARE 5% D02 IN SOYBEAN OIL AGAINST -A, -B

PHASE	ING. #	TRADENAME	SUPPLIER	INCI NAME	A NC	B EXP	C EXP
					%WT./WT	%WT./WT	%WT./WT
A	1	REACH AZP-908	SUMMIT RESEARCH	ALUMINUM/ZINC/CONIUM TETRACHLOROHYDREX-GLY	24.000	24.000	24.000
A	2	SILSURF DMC-CAP	SILTECH	PEGPPG 1916 DIMETHICONE	2.500	2.500	2.500
B	3	SF1202	MOMENTIVE	CYCLOPENTASILOXANE	30.000	0.000	0.000
B	4	SILWAX D02	SILTECH	(LOT MR2665)	0.000	30.000	1.500
B	4	SOYBEAN OIL	(HOUSE)	GLYCINE SOJA (SOYBEAN) OIL	0.000	0.000	28.500
C	5	FANCOL IH-CG	FANNING	ISOHEXADECANE	9.000	9.000	9.000
C	6	PROBUTYL 14	CRODA	PPG-14 BUTYL ETHER	9.000	9.000	9.000
C	7	CASTORWAX NF	VERTELLUS	HYDROGENATED CASTOR OIL	2.500	2.500	2.500
C	8	PROTOMATE 400-DS	PROTAMEEN	PEG-8-DISTEARATE	1.000	1.000	1.000
C	9	CRODACOL S-95 NF	CRODA	STEARYL ALCOHOL	18.000	18.000	18.000
D	10	270764 TALC USP 300 BC 127	BRENTNAG	TALC	3.000	3.000	3.000
D	11	CAB-O-SIL M-5	CABOT	SILICA	0.500	0.500	0.500
E	12	FRAGRANCE BLUE MUSK	LEBERMUTH	FRAGRANCE (PARFUM)	100.000	100.000	100.000

**PROCEDURE:**

- 1) IN A SIDE VESSEL, COMBINE PHASE A INGREDIENTS, IMPELLER MIX TO UNIFORMITY.
- 2) IN MAIN VESSEL, HEAT PHASE B INGREDIENT TO 70C UNDER AGITATION, CONTINUE MIXING AND ADD PHASE A, BRING TO 75C.
- 3) COMBINE PHASE C IN SIDE VESSEL, HEAT TO 85C UNDER IMPELLER AGITATION AND MIX TO UNIFORMITY.
- 4) ADD PHASE C TO AB UNDER HOMOGENIZATION, MAINTAIN BATCH AT 80C.
- 5) PRECOMBINE PHASE D, ADD TO BATCH UNDER HOMOGENIZATION, BEGIN COOLING.
- 6) ADD PHASE E AT 70C UNDER HOMOGENIZATION, CONTINUE COOLING.
- 7) POUR BATCH INTO STICKS AT 65C.
- 8) HEAT-TREAT SURFACES.

**SPECIFICATIONS:**

pH: N/A  
 VISCOSITY: N/A  
 MP: TBD  
 PENETROMETRY: TBD

**DESCRIPTION:**

ANTIPERSPIRANT STICKS CONTAINING ETHER CYCLOPENTASILOXANE OR EXPERIMENTAL SUBSTITUTE, ENHANCED ACTIVES RELEASE.

**NOTES:**

- 1) THE EXPERIMENTAL STICKS "MADE" BETTER. INGREDIENTS COSULUBILIZED MORE READILY THAN IN CONTROL BATCH.
- 2) THERE WERE COLOR VARIATIONS IN THE 2 SAMPLES OF D02 PRESENTED. THE MORE WATER-WHITE ONE WAS USED.
- 3) 500G -C: PREPARED 2/18/09 TO DETERMINE EFFECT OF SOYBEAN OIL/D02 BLEND ON APPLICATION.

**DISCLAIMER:**

THE INFORMATION PRESENTED HEREIN IS BASED ON OUR OWN APPROACH AND THAT OF OTHERS AND IS BELIEVED TO BE CORRECT. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED. NO STATEMENT HEREIN EXTENDS ANY LICENSE, EITHER EXPRESSED OR IMPLIED. THIS INFORMATION IS FURNISHED UPON THE CONDITION THAT THE PERSON(S) RECEIVING IT SHALL MAKE HIS (THEIR) OWN TESTS TO DETERMINE THE SUITABILITY THEREOF FOR HIS (THEIR) PARTICULAR PURPOSE.

**PREPARED BY:**

SHERILEE J. BACKMAN  
 TECHNICAL DIRECTOR  
 VENUS OF VERMONT, INC.  
 www.venusofvermont.com  
 sherilee@venusofvermont.com  
 T. +1 240-871-8355  
 12-Feb-09  
 SUBMITTED FOR INITIAL APPROVAL FEBRUARY 12, 2009.  
 SUBMITTED FOR SECOND APPROVAL FEBRUARY 24, 2009.

**Sitech LLC**  
 2170 Luke Edwards Road  
 Dacula, GA 30019  
 20th Anniversary