

## COSMETIC & PERSONAL CARE APPLICATIONS

Application	STBC Products	Function
Tooth paste	Sorbitol Liquid	bulking agent, crystallization inhibitor, flavoring agent/sweetener, humectant, shelf-life extender
Mouth Wash	Sorbitol Liquid	bulking agent, crystallization inhibitor, flavoring agent/sweetener, humectant, shelf-life extender
Emollient Creams and Lotions	Sorbitol Liquid	bulking agent, conditioner, humectant plasticizer, gloos enhancer, texture enhancer, shelf-life extender, suspending agent
Shampoo and Conditioner	Sorbitol Liquid	bulking agent, conditioner, humectant plasticizer, gloos enhancer, texture enhancer, shelf-life extender
Hair Styling Cream	Sorbitol Liquid	bulking agent, conditioner, humectant plasticizer, gloos enhancer, texture enhancer, shelf-life extender
Brushless Shaving Cream	Sorbitol Liquid	humectant, plasticizer
Liquid Soap	Sorbitol Liquid	bulking agent, conditioner, humectant gloos enhancer, softener, texture enhancer
Lipstick	Sorbitol Liquid	gloos enhancer, softener, texture enhancer

## LIQUID PRODUCT SPECIFICATIONS

TEST ITEM	LTS	Amameal	D-SORB 92
1 Description	Colorless, clear liquid. It is odorless and has a sweet taste.	Colorless, clear liquid. It is odorless and has a sweet taste.	Colorless, clear liquid. It is odorless and has a sweet taste.
2 Specific gravity (25/25°C)	Not less than 1.2995	-	Not less than 1.2985
3 Purity			
(1) pH (35% sol.)	5.5 ~ 6.5	5.0 ~ 6.5	5.0 ~ 7.0
(2) Chloride	Not more than 5.0 µg/g	-	-
(3) Sulfate	Not more than 5.0 µg/g	-	-
(4) Heavy metals	Not more than 1.0 µg/g	Not more than 5.0 µg/g	-
(5) Nickel	Not more than 0.5 µg/g	Not more than 2.0µg/g	Not more than 1.0 ppm
(6) Arsenic	Not detected	Not more than 2.0µg/g	-
(7) Iron	Not more than 1.0 µg/g	-	-
(8) Lead	-	-	Not more than 0.5 ppm
4 Reducing Sugar	Not more than 0.03 %	Not more than 0.3 %	Not more than 0.10 %
5 Total Sugar	-	-	Not more than 2.50 %
6 Dry Substance	-	-	70 ± 0.5%
7 D-Sorbitol ( HPLC )	Not less than 97.0 %	46.0 ~ 49.0 %	91.5% min
8 Mannitol ( HPLC )	Not more than 2%	Not more than 2%	Not more than 2%
9 Total Count of Microorganisms	Not more than 150 cfu/ml	Not more than 150 cfu/ml	Not more than 200 cfu/ml

## LIQUID PRODUCT SPECIFICATIONS

TEST ITEM	D-SORB 80	D-SORB 80(HM)	D-SORB 65
1 Description	Colorless, clear liquid. It is odorless and has a sweet taste.	Colorless, clear liquid. It is odorless and has a sweet taste.	Colorless, clear liquid. It is odorless and has a sweet taste.
2 Specific gravity (25/25°C)	Not less than 1.2995	Not less than 1.2995	Not Less than 1.2995
3 Purity			
(1) pH (35% sol.)	5.0 ~ 7.0	5.0 ~ 7.0	5.0 ~ 6.5
(2) Chloride	-	-	-
(3) Sulfate	-	-	-
(4) Heavy metals	-	-	Not more than 1.0 µg/g
(5) Nickel	Not more than 1.0 ppm	Not more than 1.0 ppm	Not more than 0.6 µg/g
(6) Arsenic	-	-	Not more than 0.5 µg/g
(7) Iron	-	-	-
(8) Lead	Not more than 0.5 ppm	Not more than 0.5 ppm	-
4 Reducing Sugar	Not more than 0.15 %	Not more than 0.2 %	Not more than 0.15 %
5 Total Sugar	6.0 ~ 8.0 %	5.0 ~ 9.0 %	10.0 ~ 15.0 %
6 Dry Substance	70 ± 0.5%	70 ± 0.5%	-
7 D-Sorbitol ( HPLC )	80.0 ~ 85.0%	74.0 ~ 85.0%	64.0 ~ 70.0%
8 Mannitol ( HPLC )	Not more than 2%	2.0 ~ 6.0 %	Not more than 2%
9 Total Count of Microorganisms	Not more than 200 cfu/ml	Not more than 200 cfu/ml	Not more than 200 cfu/ml

## POWDER PRODUCT SPECIFICATIONS

TEST ITEM	SPECIFICATIONS
1 Description	A white, crystalline, powder, odourless. Very soluble in water, practically insoluble in alcohol.
2 Purity	
(1) Chloride	Not more than 50.0 ppm
(2) Sulfate	Not more than 100.0 ppm
(3) Heavy metals	Not more than 5.0 ppm
(4) Nickel	Not more than 1.0 ppm
(5) Arsenic	Not more than 3.0 ppm
(6) Lead	Not more than 0.5 ppm
3 Reducing Sugar	Not more than 0.2 %
4 Total Sugar	Not more than 1.0 %
5 Loss on drying	Not more than 1.0 %
6 Residue on ignition	Not more than 0.1 %
7 D-Sorbitol ( HPLC )	Not less than 97.0%
8 Total Count of Microorganisms	Not more than 100 cfu/g