

Products Information

Silicone Emulsion for Personal care products

1. Introduction

These products generally offer the following properties to enhance the performance of hair care products.

- silky softness, wet/dry combing, fly-away control, sheen, gloss and moisture control

2. Products List

Products Name	Appearance(a)	Solid Contents	pH[25℃]	Specific Gravity	Particle Size	INCI Name
CS-770	MWE	62% ± 2	5.5~8.0	0.98± 0.02	2~4 μ m	Dimethicone & Laureth3 & Laureth 20
CS-770A	MWE	62% ± 2	5.5~8.0	0.98± 0.02	10~20 μ m	Dimethicone & Steareth 2 & Steareth 20
CS-2000	TE	35% ± 2	7.0~9.0	1.01± 0.02	>1 μ m	Amodimethicone & C12-14 Sec-Pareth-7

(a) MWE = Milky White Emulsion , TE = Transparent Emulsion

3. Products Description

3.1 CS-770

CS-770 is an o/w type hair care product in high concentration that emulsifies with highly polymerized silicone gum and dispersed mixture in Dimethyl polysiloxane of low viscosity.

Features :

- Excellent emulsion stability
- Outstanding hair treatment features
- Prevention of oily hair
- An outstanding improvement effect on the gloss and the softness of hair.
- Protects hair when you use brush or hair drier.

Application :

- Shampoo

3.2 CS-770A

CS-770A is an o/w type hair care product in high concentration that emulsifies with highly polymerized silicone gum and dispersed mixture in Dimethyl polysiloxane of low viscosity.

Features :

- Excellent emulsion stability
- Outstanding hair treatment features
- Prevention of oily hair
- An outstanding improvement effect on the gloss and the softness of hair.
- Protects hair when you use brush or hair drier.

Application :

- Rinse

3.3 CS-2000

CS-770 is an o/w type hair care product that emulsified the amino-modified silicone.

Features :

- Excellent emulsion stability
- Outstanding hair treatment features
- Prevention of oily hair
- An outstanding improvement effect on the gloss and the softness of hair.
- Protects hair when you use brush or hair drier.

Application :

- Transparent type shampoo

4. Silicone emulsion for personal care products

4.1 Formulation guide (in manufacturing shampoo)

4.1.1 Formulation

phase	Ingredient	%
1	Emulsion agent	1.5
	Additive 1	7.5
	Antiseptic 1	0.2
2	Antiseptic 2	0.2
	Deionic water	36.86
3	Surfactant	15.0
	SPLE	35.0
	Antiseptic 3	0.2
	Coating agent (CS-770)	3.0
4	Perfume	0.5
	Extract	0.040
Total		100

4.1.2 Procedure

1. Melting phase 1 and heating 90°C. Then mix
 2. Mixing phase 2 and 3 each other then add it to phase 1
 3. mixing phase 4 and add to phase 1
 4. Cooling to 30°C and filtering 200mesh
- (Note: In each step, stir in use by homo-mixer)

4.1.3 Comparison data

	blank	Addition
Softness	common	Good
Gloss	Common	Good
Conditioning	Common	Very good
Foaming ability	Good	Common
combing	common	Very good

(Note: It has a difference because the above formulatins are just normal example)

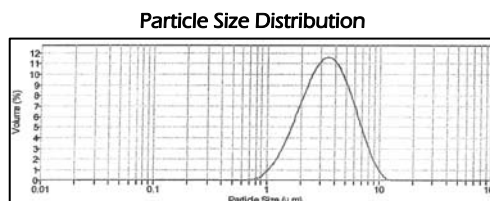
4.2 Technical data

4.2.1 Particle size distribution

1) CS-770

mastersizer 2000 Ver.1.00 , Malvern instruments LTD.

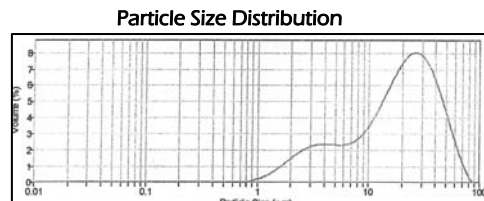
Concentration: 0.0049 %Vol. Vol. Weighted Mean D[4,3]: 3.785 μ m
 Span(10%~90%): 1.369 Specific Surface Area: 2.02131m/g
 Uniformity: 0.425753 Surface Weighted Mean D[3,2]: 2.968 μ m



2) CS-770A

mastersizer 2000 Ver.1.00 , Malvern instruments LTD.

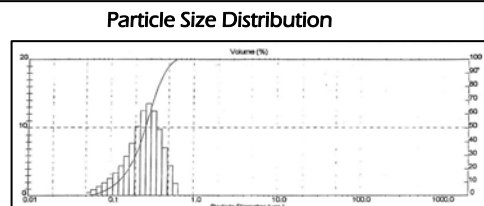
Concentration: 0.0142 %Vol. Vol. Weighted Mean D[4,3]: 22.227 μ m
 Span(10%~90%): 2.136 Specific Surface Area: 0.65525m/g
 Uniformity: 0.658284 Surface Weighted Mean D[3,2]: 9.157 μ m



3) CS-2000

mastersizer microplus Ver.2.18, Malvern instruments LTD.

Concentration: 5.2784 %Vol. Density: 1.000 g/cub.cm
 Span: 1.244E+00 Specific Surface Area: 27.6773sq.m/g
 Uniformity: 3.783E-01



5. Additional Information

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Packing This product is available in 20kg pail & 200kg drum.