

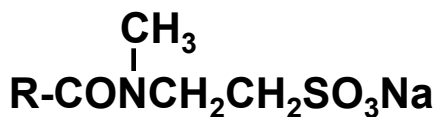
DIAPON® K-SF POWDER

 NOF CORPORATION

Sodium Methyl Cocoyl Taurate

1 Features of DIAPON® K-SF POWDER

★ DIAPON® K-SF POWDER



R-CO : Cocoyl

INCI NAME : Sodium Methyl Cocoyl Taurate

CAS No. : 61791-42-2

EINECS No. : 263-174-9

TSCA : Registered

RSPO: Registered

Appearance : White or light yellow solid

Residue on Drying : 95%

Sodium chloride : 2-3%

● Amino acid-based surfactant made from N-methyltaurine

It's well-known as an mild amino acid-based surfactant derived from plant origin.

● High chemical stability

It is available in wide pH range because of high hydrolytic stability and resistance to acids and bases.

● High foaming ability in wide pH

A fine, rich foam can be obtained in a wide pH.

● Having low Cyto-toxicity and Hemolysis

It shows excellent mildness compared with AES and SLS.

● Achieve high concentrations

It can be used in high concentration products and powder products.

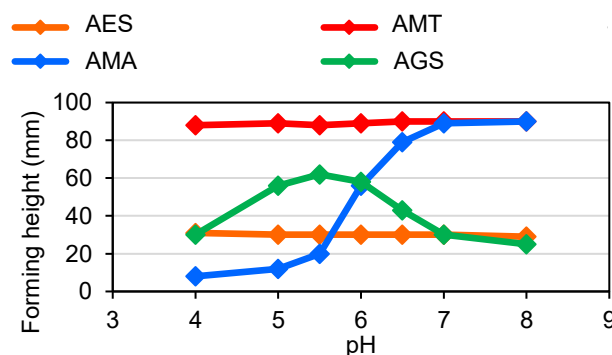
2 Appearance



By powderization, it can be used in high concentration products and powder products.

3 pH Dependence of Foaming

Surfactant concentration 1wt%, 40°C, Milcer method

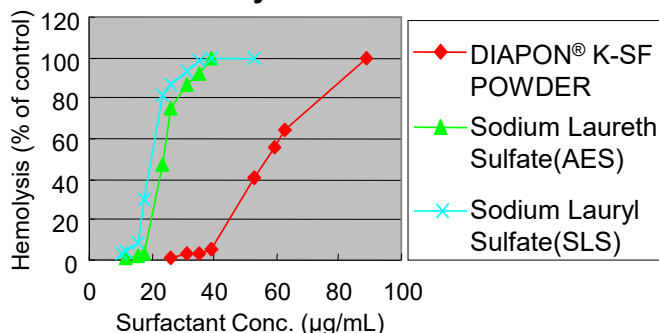


AES...Sodium Laureth Sulfate, AMT... DIAPON® K-SF POWDER, AMA...Sodium Lauroyl Methylaminopropionate, AGS... Sodium Cocoyl Glutamate

High foaming ability in wide pH range.

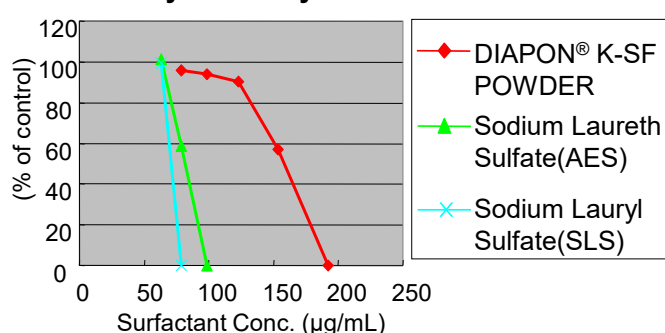
4 Hemolysis and Cyto-toxicity

Hemolysis



DIAPON® K-SF POWDER shows less Hemolysis compared with Sodium Laureth Sulfate and Sodium Lauryl Sulfate.

Cyto-toxicity



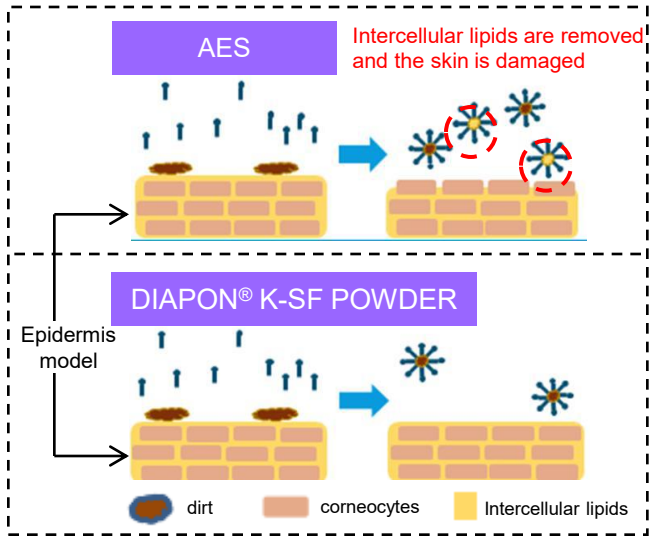
DIAPON® K-SF POWDER shows less Cyto-toxicity compared with Sodium Laureth Sulfate and Sodium Lauryl Sulfate.

DIAPON® K-SF POWDER

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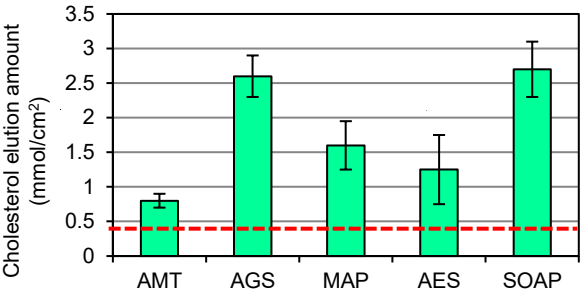
Sodium Methyl Cocoyl Taurate

5 Selective Detergency



<Cholesterol elution test>

Test subject: Human chest
Treatment method: Active agent concentration 25mM, 10 minutes
Measurement method: Cholesterol is determined by HPLC after tape stripping



Sample: AMT... DIAPON® K-SF POWDER AGS... Sodium Cocoyl Glutamate
MAP...Sodium Alkylphosphate AES...Sodium Laureth Sulfate
SOAP...Sodium Laurate

*The broken line is the elution amount during water washing.

Source: Journal of Japan Oil Chemists' Society Volume 38 (1989) Issue 4,
Pages 297-305, "Anionic Surfactants as Detergents for Scalp and Hair"

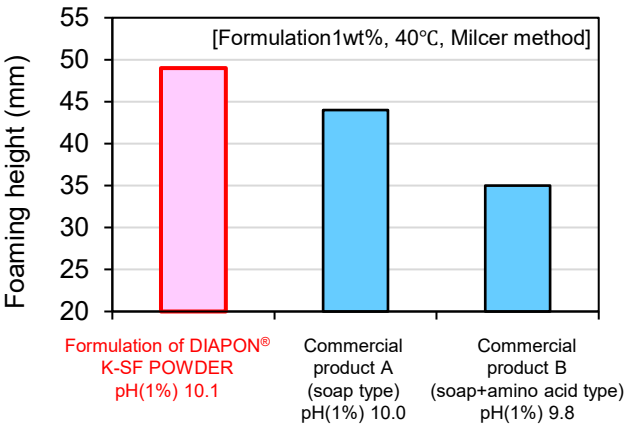
AMT (DIAPON® K-SF POWDER) has the lowest elution amount of cholesterol (intercellular lipid).

6 Formulation of DIAPON® K-SF POWDER(Face wash cream)

	Ingredients	INCI	wt%
A	—	GLYCERIN	25.00
	—	MYRISTIC ACID	18.00
	DIAPON® K-SF POWDER	SODIUM METHYL COCOYL TAURATE	2.50
	—	PALMITIC ACID	6.00
	—	LAURIC ACID	3.00
	—	STEARIC ACID	3.00
	UNISTER® E-286	GLYCOL DISTEARATE	3.00
	ANON™ LA	DISODIUM LAURIMINODIACETATE, WATER	2.50
	ANON™ BDF-R	COCAMIDOPROPYL BETAINE, WATER	1.25
	ACROBUTE® MB-52	PPG-52 BUTYL ETHER	0.50
B	—	GLYCERYL STEARATE SE	0.25
	—	POLYQUATERNIUM-7	0.20
	—	TETRASODIUM EDTA	0.05
	—	WATER	Balance
	—	POTASSIUM HYDROXIDE	5.95
	Total		100.00

[Representative value]
pH (10%) : 10.0

Foaming ability of the formulation



Higher forming ability than commercial products.

Formulation stability(50°C)



Formulation of DIAPON® K-SF POWDER



Commercial product A (soap type)



Commercial product B (soap+amino acid type)

High stability even during high temperature storage.