

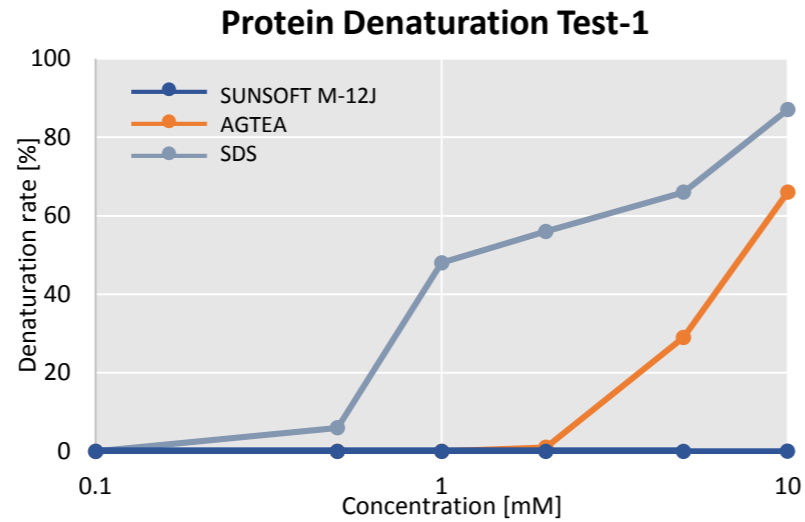
Mildness and Safety

Reduction on Protein Denaturation

Protein denature test with egg albumen indicated that SUNSOFT M-12J is a safer and more moderate material than AGTEA and SDS.

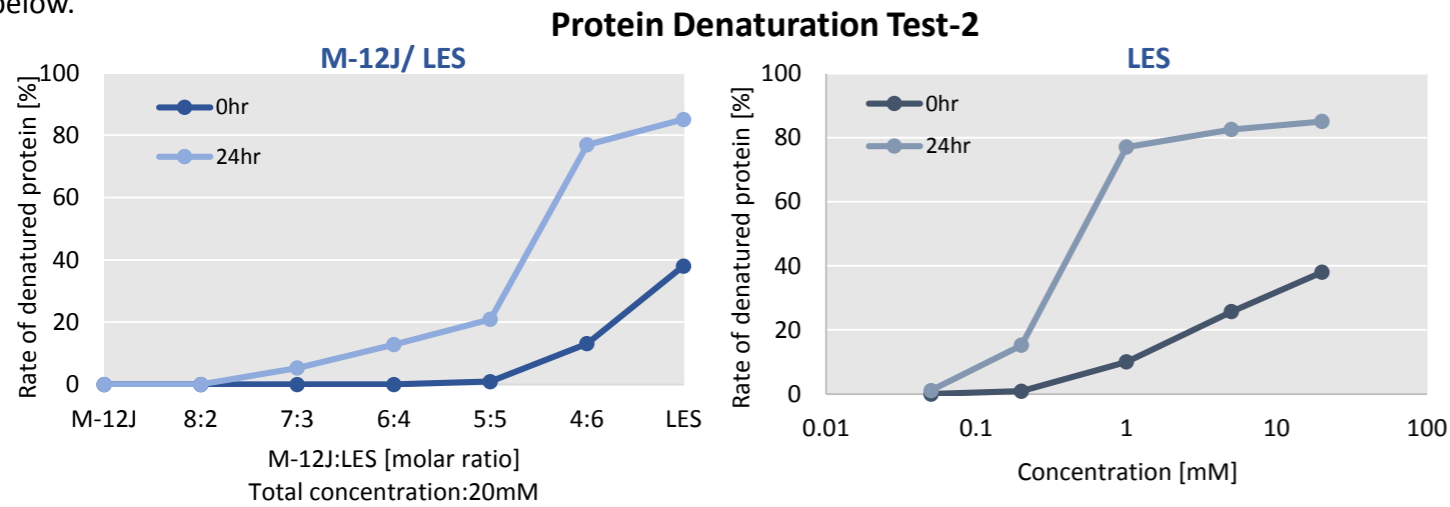
SUNSOFT M-12 J did not denature the albumen proteins even at 10mM.

This data suggests that SUNSOFT M-12 J has necessary and sufficient properties as a detergent while being very safe to skin.



Reduction on Protein Denaturation (when combined with LES)

By using SUNSOFT M-12J together with LES, the denaturation of proteins caused by LES is suppressed as shown below.

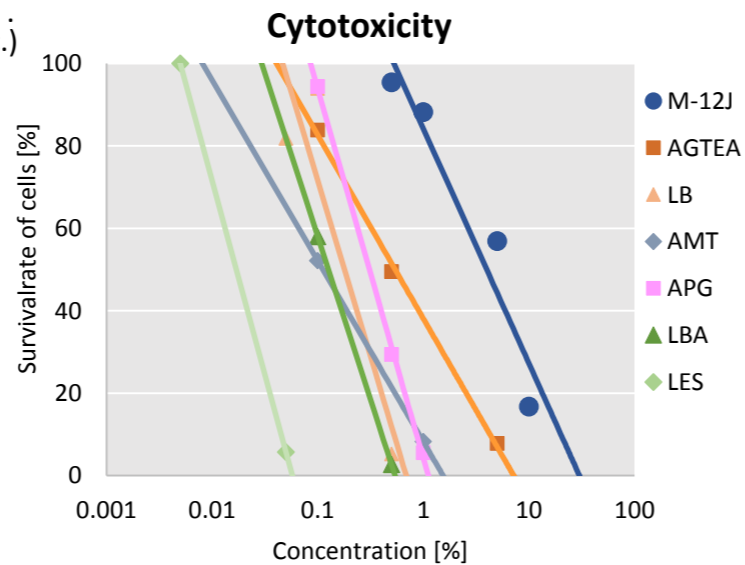


Citotoxicity

The safety of SUNSOFT M-12J was proven by TESTSKIN® (Skin reconstruction Model, Toyobo /Organogenesis, Inc.)

Surfactants	EC ₅₀ :%
M-12J	4.00
AGTEA	0.54
LB	0.19
AMT	0.18
APG	0.13
LBA	0.11
LES	0.02

The EC₅₀ (effective concentration that inhibits MTT conversion by 50% compared with the untreated control concentration) of SUNSOFT M-12J is remarkably higher than other surfactants as shown on the right.



Low Irritant Detergent SUNSOFT M-12J

INCI: Polyglyceryl-10 Laurate

Unlike conventional polyglycerol fatty acid esters, SUNSOFT M-12J has a monoester as its main ingredient.



- Nonionic surfactant having superior detergent and foaming ability.
- High mono-ester content compared to conventional polyglycerol fatty acids esters .
- Low irritant detergent, mild on eyes and skin.
- Will not lead to dryness or tightness on skin and leaves no slimy residue.
- Gives an ideal hydrated after-feel on the skin.
- Being stable under broad pH range.
- Conforms to the Japanese cosmetic ingredients codex and Japanese standards of food additives.

Comparison of Composition

