A functional approach to reduce skin irritation and protect skin barrier function

Liceryl<sup>™</sup>-12 and Eceryl<sup>™</sup>-12 are PEG-esters derived from linoleic and erucic fatty acids, respectively, and act as co-surfactants with emollient and solubilizing properties. They combine with surfactant micelles increasing their diameter to exceed that of the epidermal water channels. This action reduces skin erythema and barrier function disruption caused by surfactant penetration in the skin. Liceryl<sup>™</sup>-12 and Eceryl<sup>™</sup>-12 are synthesized with glycerin; an endogenous component of the skin known for its humectant properties. Linoleic acid is an unsaturated omega-6 fatty acid (18:2  $\omega$ -6) and prevalent in soybean oil (*Glycine max*). Erucic acid is a monounsaturated omega-9 fatty acid (22:1  $\omega$ -9) found in rapeseed oil (*Brassica napus*).

## Clinical actions

- Increase the average diameter of SDS-micelles
- Prevent SDS-induced damages to the barrier function
- · Reduce SDS-induced skin erythema

## Technical information

- Liceryl™-12: Glyceryl Linoleate, PEG-12 Oleate
- Eceryl<sup>™</sup>-12: Glyceryl Erucate, PEG-12 Oleate;
- Soluble in water
- Dispersible in oils
- Solubilizing properties for fragrances and essential oils
- Recommended use level: 1-10%
- Ideal for:
  - Facial cleansers
  - Body wash
  - Shampoo
  - Make-up removers
  - Baby care
  - Sensitive skin management

Formulation applications		Liceryl <sup>™</sup> -12	Eceryl <sup>™</sup> -12	Functions
Toiletries	Shampoos	+++	+++	Co-surfactants, Aesthetic Foam Improver, Emollient, Anti-irritant
	Body wash toiletries	+++	+++	
Clear Systems	Clear toner lotions	+++	+	- Emollient Agents in hydrophilic systems and Solubility Promoters
	Make up remover	+++	+	
	Clear Gel	+++	+	
Emulsions	Hair conditioners and masks	++	+++	Emollient Agents, Co-emul- sifiers and Cleansing Agent
	Body lotions and creams	++	+++	
	Cleansing creams	++	+++	



