



TOXICOLOGY/REGULATORY SERVICES, INC.

CONFIDENTIAL

Interpolymer Cosmetic Ingredient Safety Dossier

Product Identification:	Syntran KL-219C
INCI Designation:	Ammonium Acrylates Copolymer (and) Propylene Glycol and Sodium Lauryl Sulfate (and) Disodium Deceth-6 Sulfosuccinate
CAS Number:	63744-68-3
Physical Description:	Colorless, clear to slightly translucent liquid with a slight acrylic odor

Typical Composition:	
Water:	71 – 72%
Ammonium Acrylate Copolymer:	23 – 24%
1,2-Propanediol:	2 – 3%
Sodium Alkylpolyethoxyethanol Sulfosuccinate:	1%
Sodium Lauryl Sulfate:	1%
Bacterial Preservative:	0.20% methylparaben; 0.15% propylparaben
Residual Monomer:	< 5 ppm
Molecular Weight:	n > 50

General Toxicity:
Acute Toxicity Profile:

Because the large molecular size of this polymer limits its bioavailability and none of the components are considered to be acutely hazardous, little or no systemic toxicity would be expected by the oral, dermal and inhalation routes of exposure.

Instillation of a mixture containing 30% ammonium acrylates copolymer into the eyes of rabbits produced only slight conjunctival redness and slight ocular discharge in one animal at one hour post instillation. Ammonium acrylates copolymer was considered practically non-irritating to rabbit eyes (CIR, 1999).

Very slight, but reversible, irritation in the form of erythema was observed in one animal in the primary skin irritation test in rabbits, in which a mixture containing 30% ammonium acrylates copolymer was applied to the skin of rabbits for a four-hour period under a semi-occlusive patch. Edema was not observed at any of the test sites; therefore, ammonium acrylates copolymer was classified as practically non-irritating to the skin of rabbits (CIR, 1999).

Since almost no evidence of irritation was observed in the primary skin irritation test, the sensitization potential of ammonium acrylates copolymer is unlikely.

Genetic Toxicity Profile:

A reverse mutation assay (modified Ames) was conducted using a mixture of 30% ammonium acrylates copolymer in *Salmonella typhimurium* strains TA98, TA100, TA1535, TA1537 and *Escherichia coli* WP2uvrA. Ammonium acrylates copolymer was negative in the test for mutagenicity (CIR, 1999).

Human Toxicity Profile:

This type product has been safely used in leave-on cosmetic products for over 25 years.

Conclusion:

Acrylate copolymers are considered safe for use in cosmetic formulations when formulated to avoid irritation.



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Reference

CIR (Cosmetic Ingredient Review) (1999) Final report on the safety assessment of acrylates copolymer, ammonium acrylates copolymer, ammonium VA/acrylates copolymer, sodium acrylates copolymer, ethylene/acrylic acid copolymer, ethylene/calcium acrylate copolymer, ethylene/magnesium acrylate copolymer, ethylene/sodium acrylate copolymer, ethylene/zinc acrylate copolymer, ethylene/acrylic acid/VA copolymer, acrylates/PVP copolymer, acrylates/VA copolymer, steareth-10 allyl ether/acrylates copolymer, acrylates/steareth-50 acrylate copolymer, acrylates/steareth-20 methacrylate copolymer, acrylates/ammonium methacrylate copolymer, styrene/acrylates copolymer, styrene/acrylates/ammonium methacrylate copolymer, ammonium styrene/acrylates copolymer, sodium styrene/acrylates copolymer, acrylates/hydroxyesters acrylates copolymer, methacryloyl ethyl betaine/acrylates copolymer, lauryl acrylate/VA copolymer, VA/butyl maleate/isobornyl acrylate copolymer, ethylene/methacrylate copolymer, vinyl caprolactam/PVP/dimethylaminoethyl methacrylate copolymer, sodium acrylates/acrolein copolymer, PVP/dimethylaminoethylmethacrylate copolymer, AMP-acrylates copolymer, polyacrylic acid, ammonium polyacrylate, potassium aluminum polyacrylate, potassium polyacrylate, sodium polyacrylate. Cosmetic, Toiletry, and Fragrance Association; December 21.