



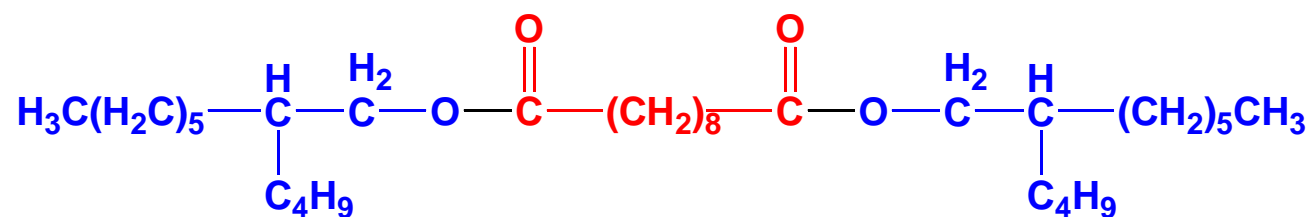
# DS-1220

Superior Oily Ingredient for  
Cleansing Preparations



# DS-1220 : Chemical Structure

INCI name : Dibutyloctyl Sebacate



# Characteristics of DS-1220

DS-1220 is an oil and has a rich texture. It is highly compatible with pigments and is perfect as an ingredient for cleansers and make-up products

- Original texture oil
- Superior compatibility with pigments
- Has superior ability to dissolve poorly soluble ingredients
- Easy to handle even at low temperatures thanks to its low pour point, approximately  $-60$  Celsius
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# Cleansing Properties of DS-1220



Fig. 1 The skin after using a cleansing oil with DS-1220



Fig. 2 The skin after using a cleansing oil with triethylhexanoin (control)

On the back of the subject's hand, a lip color was applied and left for 15 minutes. Then 0.05mL of the cleansing oil was applied with a finger. The hand was washed with running water and dried by a blower.

	1	2
NIKKOL GO-430	11.0	11.0 (wt%)
NIKKOL SO-15	4.0	4.0
<b>DS-1220</b>	<b>40.0</b>	—
Triethylhexanoin	—	40.0
Mineral Oil	45.0	45.0

# Solubility of poorly soluble ingredients in DS-1220

Poorly soluble ingredients	Solubility* (wt%)
Ethylhexyl Triazone (Uvinul T150)	14.0
Butyl Methoxydibenzoylmethane	15.0
Pyridoxine Dicaprylate (NIKKOL DK)	15.0

\* Solubility was evaluated after dissolving each ingredient in DS-1220 at 80 Celsius and successively left at room temperature for 24 hours.

# Compatibility of DS-1220 with oily ingredients for cosmetics

Oily Ingredients	Concentration of DS-1220		
	10 wt%	30 wt%	50 wt%
Ethylhexyl Palmitate	S	S	S
Macadamia Ternifolia Seed Oil	S	S	S
Mineral Oil (70 sec.)	S	S	S
Cyclomethicone	S	S	S
Phenyl Trimethicone	S	S	S
Dimethicone (10mm <sup>2</sup> /s)	S	S	I

S: Soluble I: Insoluble

# Safety of DS-1220

- Skin irritation (Non-animal alternative test)  
: No irritation
- Eye irritation (Non-animal alternative test)  
: No irritation

# Cleansing Cream

A) Pemulen TR-2 (Acrylates/C10-30 Alkyl Acrylate Crosspolymer)	0.2 (wt%)
Carbopol Ultrez 10 (Carbomer)	0.2
B) Purified Water	30.0
C) Triethanolamine	0.3
Purified Water	9.7
D) <b>DS-1220 (Dibutyloctyl Sebacate)</b>	<b>40.0</b>
NIKKOL GO-430 (Sorbeth-30 Tetraoleate)	3.0
Preservative	q.s.
E) Glycerin	5.0
Purified water	to make 100.0

## <Procedure>

Disperse A into B at room temperature. Mix C into the mixture (A+B) to gelify it. In a separate vessel, combine D, while heating and mixing. Add D by small portions to the gel (A+B+C) to emulsify. Add E to the new mixture and mix until homogeneous and then let the mixture sit.

# Conclusion

## DS-1220

- Superior ingredient for cleansers
- Solubilizer for poorly soluble substances
- Oily ingredients with rich texture
- Can be handled at low temperatures