Technical Data Sheet

MIGLYOL® 812 N(F)

INCI:

MIGLYOL® 812 N(F): Caprylic/Capric Triglyceride

- ❖ Non- greasy emollient
- ❖ Medium spreadability
- ❖ Good absorption on skin

綿半トレーディング株式会社
Watahan Trading Co.,Ltd.

OLEOCHEMICALS

Personal Care

1. Description:

MIGLYOL® 812 N (F) is a 100% natural based triglyceride of saturated vegetable oil-derived caprylic and capric fatty acids and glycerin.

The fatty acids used for the production of MIGLYOL® 812 N (F) comply with CFR** 21, § 172.860 and are classified as GRAS**.

MIGLYOL® 812 N (F) is a clear, virtually colorless liquid of neutral odor and taste. It is very pure because of its carefully selected raw materials. Due to the fully saturated nature of the raw material it is very stable against heat, oxidation or light.

*** CFR = Code of Federal Regulations; ** GRAS = Generally Recognized As Safe;*

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2. Chemical and Physical Properties:

Tests	Value	Unit
Acid value	max. 0.2	mg KOH/g
Iodine value	max. 1	mg I/100 mg
Saponification value	325 – 345	mg KOH/g
Peroxide value	max. 1	mequi O/kg
Hydroxyl value	max. 5	mg KOH/g
Color	max. 100	APHA
Water	max. 0.1	%
Refractive index	1.449 – 1.451	n20D
Density at 20°C	0.93 – 0.96	g/cm³
Viscosity at 20°C	25 – 33	mPa·s
Alkaline reactive substances	max. 0.15	ml 0.01N HCl/2.00g
Heavy metals	max. 10	mg/kg
Total ash	max. 0.1	%
Unsaponifiable matter	max. 0.3	%
Caproic acid (C6:0)	max. 2	%
Caprylic acid (C8:0)	50 – 65	%
Capric acid (C10:0)	30 – 45	%
Lauric acid (C12:0)	max. 2	%
Myristic acid (C14:0)	max. 1	%

** Not included in CoA*

3. Application:

MIGLYOL® 812 N (F) is miscible in all ratios with paraffin hydrocarbons and natural oils. MIGLYOL® 812 N (F) is not soluble in water and glycerol. It has a high stability against oxidation and is liquid at 0°C.

Cosmetic Functions:

MIGLYOL® 812 N (F) has the following advantages in comparison to natural oils:

- Excellent spreadability on the skin and good skin absorption.
- Does not inhibit skin-respiration.
- Excellent penetration-promoting, emollient and skin-smoothing properties.
- Very good solubility characteristics.

Skin care cosmetics:	
Creams and lotions:	Non-greasy emollient oil components with medium spreadability.
Compared with petrolatum and mineral oil:	They are skin-permeable, do not obstruct natural skin respiration.
Skin, face and baby oils:	Non-oxidizing, penetration-enhancing lipid bases.
Massage oils:	Low-viscosity oil bases with excellent spreadability.
Masks:	Emollient skin care additives.
Decorative Cosmetic:	
Make-Up, sticks, mascara:	Dispersing oil component, compatible with pigments.
Makeup remover:	Disperses pigments and acts as a solubilizer.
Cleansing cosmetics:	
Two-phase foam baths:	Fat component, readily miscible with natural oils and surfactants.
Sunscreens:	
O/W sunscreen creams:	Oil component, compatible with organic and inorganic filter agents.
W/O sunscreen creams, sunscreen oils:	Water-resistant oil components, less greasy, do not obstruct skin respiration

Thus MIGLYOL® 812 N (F) use is suggested for:

- Color cosmetics
- Body care
- Facial care
- Hair care
- Sun care

4. Formulation Guide:

Hydro Body Lotion – for normal skin 551

Phase A			
	IMWITOR 372 P[1]	Glyceryl Stearate Citrate	2.50
	IMWITOR 900 K[1]	Glyceryl Stearate	0.50
	ISOFOL 20 P [2]	Octyldodecanol	2.50
	MIGLYOL 812 N (F)[1]	Caprylic/Capric Triglyceride	6.00
	NACOL 22-98[2]	Behenyl Alcohol	1.00
	SOFTISAN 142[1]	Hydrogenated Coco-Glycerides	3.00
	PARAFOL 14-97[2]	Tetradecane	1.00
	Sunflower Oil[1]	Helianthus Annuus Seed Oil	2.50
	Mais PO4 PH"B"[3]	Distarch Phosphate	2.00
Phase B			
	Keltrol CG-T[4]	Xanthan	0.30
	Karion FP[4]	Sorbitol	3.00
	Glycerine 99.5[1]	Glycerine	4.00
	Preservatives		q.s.
	Demin. Aqua	Aqua	ad 100.00
Phase C			
	Citrate Buffer 0,1 mol/l pH 6,4	Citric Acid and Sodium Hydroxide	10.00
Phase D			
	Urea	Urea	3.00
	Demin. Aqua	Aqua	5.00
Phase E			
	Fragrance	Fragrance	q.s.
Phase F			
	Sodium Hydroxide 10% in water	Sodium Hydroxide	q.s.

Procedure:

1. Heat Phase A and B separately to approx. 75-80 °C.
2. Add Phase A to Phase B with stirring. Homogenize.
3. Cool Phase A/B with gentle stirring to approx. 40 °C.
4. Add Phase C + E to the emulsion
5. Phase D is solved at room temperature and added to the emulsion. Homogenize with low speed.
6. Cool the emulsion with gentle stirring to room temperature. Adjust pH value with Phase F to 6,0 - 6,5.

Supplier References:
[1]**IOI Oleo Personal Care ;** [2] Sasol Germany GmbH ; [3] AGRANA Beteiligungs AG; [4] CP Kelco International Limited

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5. Storage and Shelf Life:

Longterm storage in original tightly closed containers, dry, protected from light and moisture and below 25°C the shelf life then is at least three years.

- multitainer with 25 kg
- drum with 190 kg
- IBC with 950 kg
- road tanker

- Store at temperature below 25°C
- Protect from light and moisture
- Shelf life 3 years

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