

# UniSyn Fluids

## Unichem's own Blend Formulations



### Reducing Complexity Boosting Efficacy

Our unique blends have been specifically designed to offer the formulator a high purity, light, non greasy and cost effective cosmetic base. These next generation blends give the formulator a versatile product, excellent to use as a carrier for actives in **skincare, haircare, sun care and pharmaceutical preparations.**

#### Product Range

##### UniSyn Premium Plus

*(Blend of Hydrogenated Polydecenes, Isoparaffins and TMP/Tricaprylate/Tricaprate ester)*

Our premium plus blend gives a light silky feel and enhances gloss to the formulation. This blend is particularly effective in sunscreen formulations.

##### UniSyn Premium

*(Blend of Hydrogenated Polydecenes with Isoparaffin)*

The premium blend is designed to provide a versatile light non greasy base.

##### UniSyn Light

*(Blend of Isoparaffins with Hydrogenated Polydecene)*

The light blend is designed to provide a light and dry finish to formulations

##### UniSyn Ultralight

*(Blend of synthetically manufactured Isoparaffins)*

Our ultralight blend gives an exceptionally dry finish and high spread-ability, making it an effective co-solvent in a wide range of formulations including waterless hand cleaners, air fresheners and perfume solvent carriers. It also makes for a very cost effective viscosity modifier for Petrolatum.

##### Customised Blending

Use our expertise to help you develop your ideal cosmetic base. Whether it is functionality or feel, we have the solution.

- High purity
- Fully synthetic
- Non comedogenic
- Light and non greasy
- Non irritant
- Bright and clear

## Synthetic Base Fluids

### Hydrogenated Polydecenes

These unique molecules have been used in personal care and cosmetic formulations for well over 15 years and are accepted as the premium personal care and cosmetic oil for customising feel. They are exceptionally stable in high and low PH systems.

### Isoparaffins

Isoparaffins have been registered with the CTFA for more than 25 years. Key properties include high purity, mild odour, low skin irritation and superior spread-ability.

### Synthetic Esters

(Trimethylolpropane/Tricaprylate/Tricaprate)

Esters are widely used in personal care and cosmetic formulations. We have selected the highest purity light synthetic esters that are bright, clear, non irritant and non comedogenic.

## Properties

Property	Application	UniSyn Premium Plus	UniSyn Premium	UniSyn Light	UniSyn Ultralight
Light and non greasy	Hair care Skin care Suncare	Effective	Effective	Effective	Effective
High sheen, gloss and silky effect	Hair care Skin care Suncare	Very Effective			
Organic active solvency	Suncare	Effective*			Moderate
Water rejecting	Suncare Water resistant formulations	Moderate	Effective	Effective	Effective
Volatility - high spreadability and drying; comparable to ISOHEXADECANE	Make up remover Skin conditioner Anti-ageing formulations				Very Effective

\* Dispersion of particulates can be boosted using Polymeric esters

## Technical Data

Test	Method	Premium Plus	Premium	Light	Ultralight
Appearance	Visual	Bright and Clear	Bright and Clear	Bright and Clear	Bright and Clear
Specific Gravity @ 20°C	ASTM D4052	0.82	0.82	0.80	0.81
Viscosity @ 40°C cSt	ASTM D445	19	19	4.9	2.8
Flash point °C	ASTM D92	204	150	119	96
Aniline Point °C	ASTM D611	82	125	103	90

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