

STEPHENSON®
PERSONAL CARE

DUROSOFT®
NATURALLY DIFFERENT™

NATURALLY DERIVED MONOGLYCERYL
AND POLYGLYCERYL ESTERS

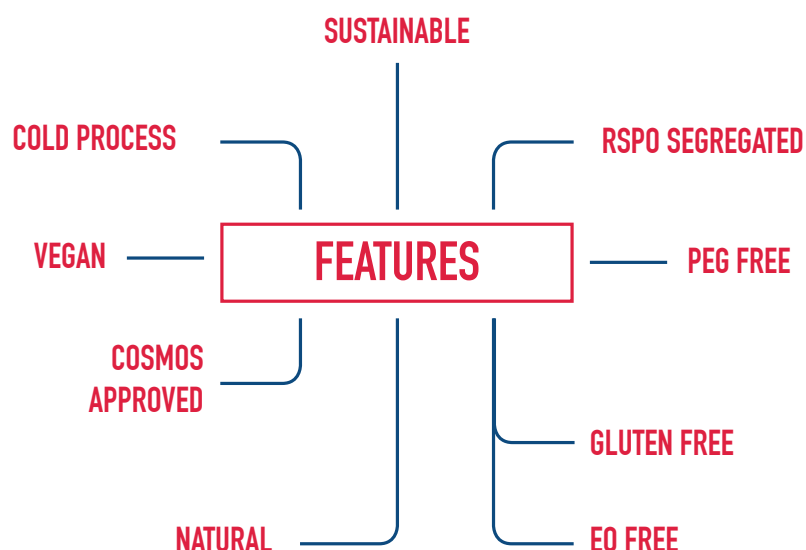
STEPHENSONPERSONALCARE.COM



DUROSOFT® IS A RANGE OF NATURALLY DERIVED MONOGLYCERYL AND POLYGLYCERYL ESTERS.

As the demand for natural products grows, formulators are now expected to apply green chemistries to their current formulations as well as future research and development. DUROSOFT® is made with natural triglycerides which have an extensive range of carbon numbers.

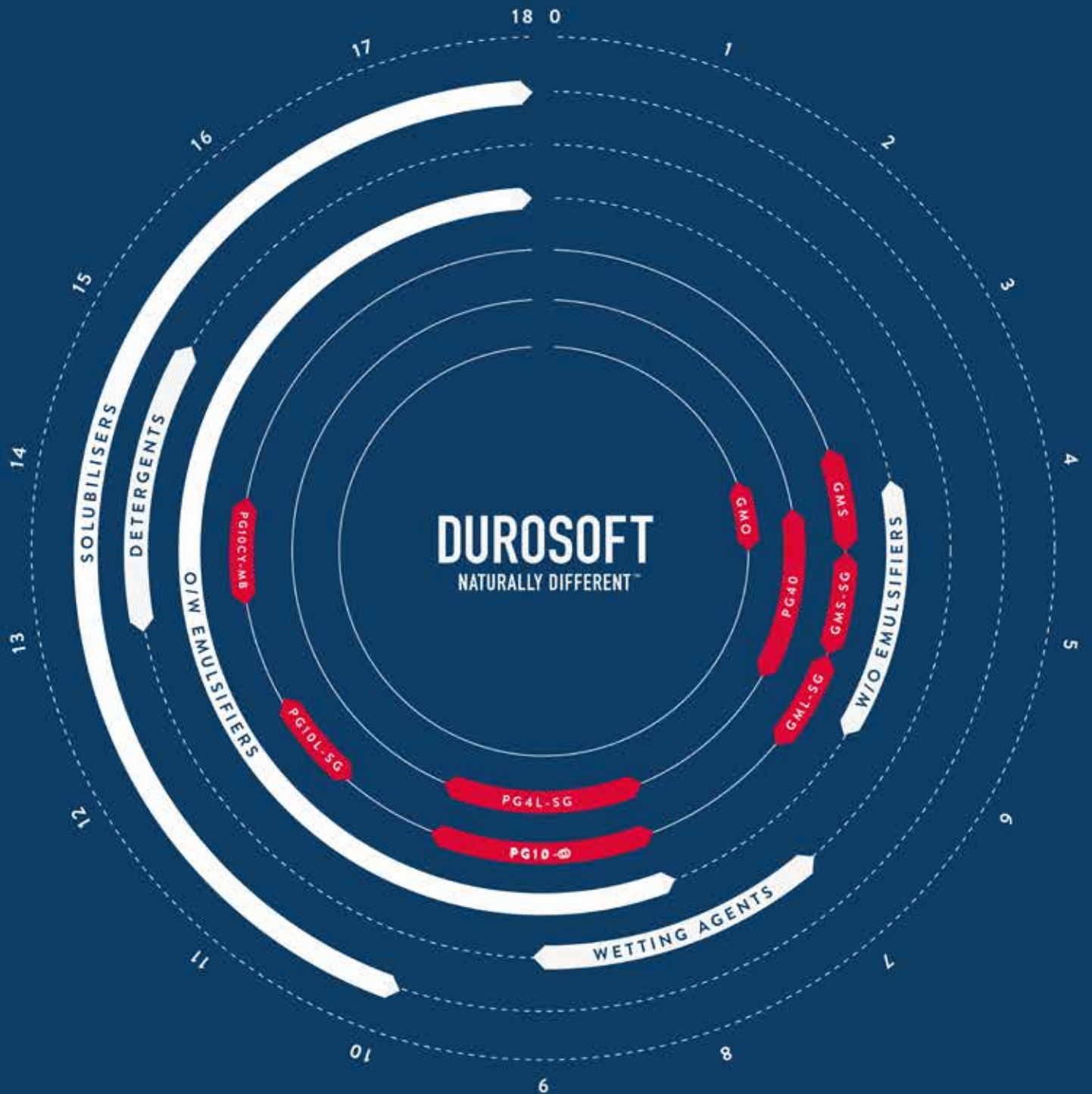
This natural composition results in a broader array of HLB than other commonly used ingredients in the market.



ADVANTAGES OF FORMULATING WITH DUROSOFT®

- > Esters that are compatible with oil and water phases
 - > Enables brand owners to make sustainable and natural finished product claims
 - > “Proposition 65” compliant
 - > Portfolio covers a wide HLB range of 4 – 14 and our ingredients can be used in combination with each other to achieve the required HLB of a formulation
 - > Electrolyte tolerant
 - > REACH compliant
-

HLB RANGE

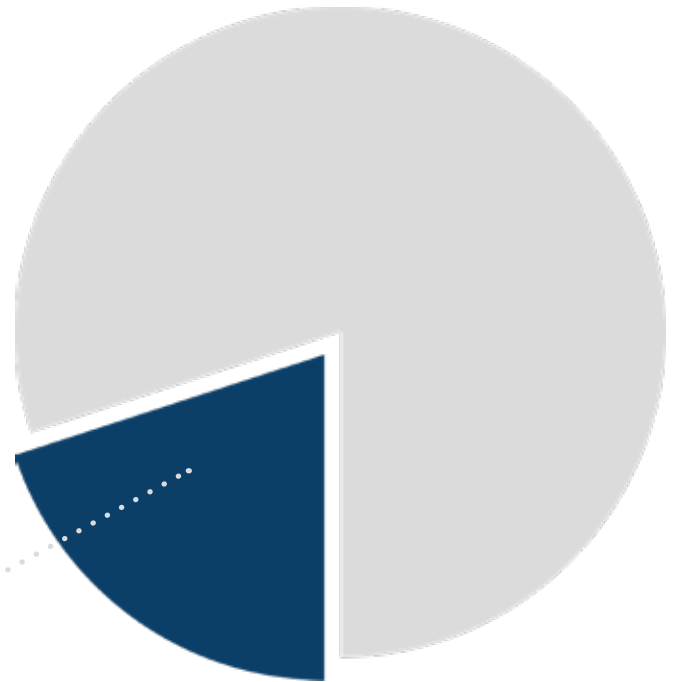


Source: "The HLB System: A Time-saving Guide to Emulsifier Selection", ICI Americas Inc.

SUSTAINABLE INGREDIENTS

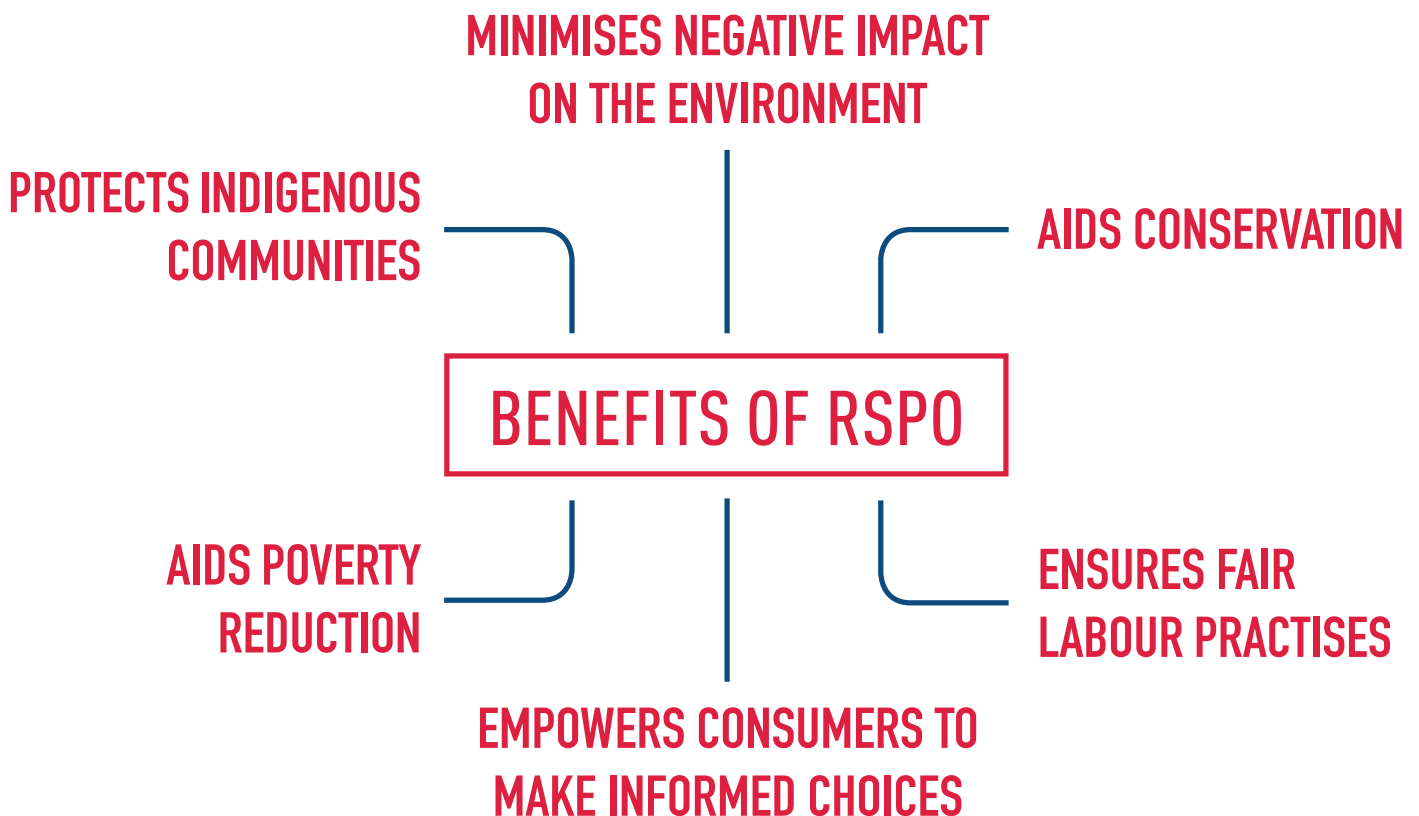
Palm oil is one of the most widely consumed vegetable oils in the world. It's versatile, easy to process and yields 4 – 10 times more oil per hectare of land than other crops such as sunflower, rapeseed and coconut.

At present 80% of palm oil in the global supply chain comes from non-certified production.



19% OF PALM OIL GLOBALLY IS CERTIFIED BY THE RSPO

70% OF PERSONAL CARE AND COSMETICS PRODUCTS CONTAIN PALM OIL OR PALM OIL DERIVATIVES



WHY SUSTAINABLE?

If it's grown sustainably, palm oil production can benefit local communities, and help to protect valuable ecosystems for endangered wildlife species.

Through the Roundtable on Sustainable Palm Oil (RSPO) certification process, palm oil or palm oil derivatives certified by the RSPO can be purchased through several supply chain systems.

RSPO CREDITS

CLAIM



TRACEABILITY



Untraced palm oil with a trading scheme to support equivalent certified sustainable production.

MINIMUM STANDARD

The minimum when the other two options are not available.



MASS BALANCE (MB)

CLAIM



TRACEABILITY



A mix of certified and uncertified palm oil- this is a temporary solution for when the best is not available.

INTERIM OPTION

"Contributes to the production of certified sustainable palm oil"



SEGREGATED (SG)

CLAIM



TRACEABILITY



Certified palm oil that is sustainable, fully traceable and meets the RSPO's standards.





100% SUSTAINABLE

Companies should aim for this standard.

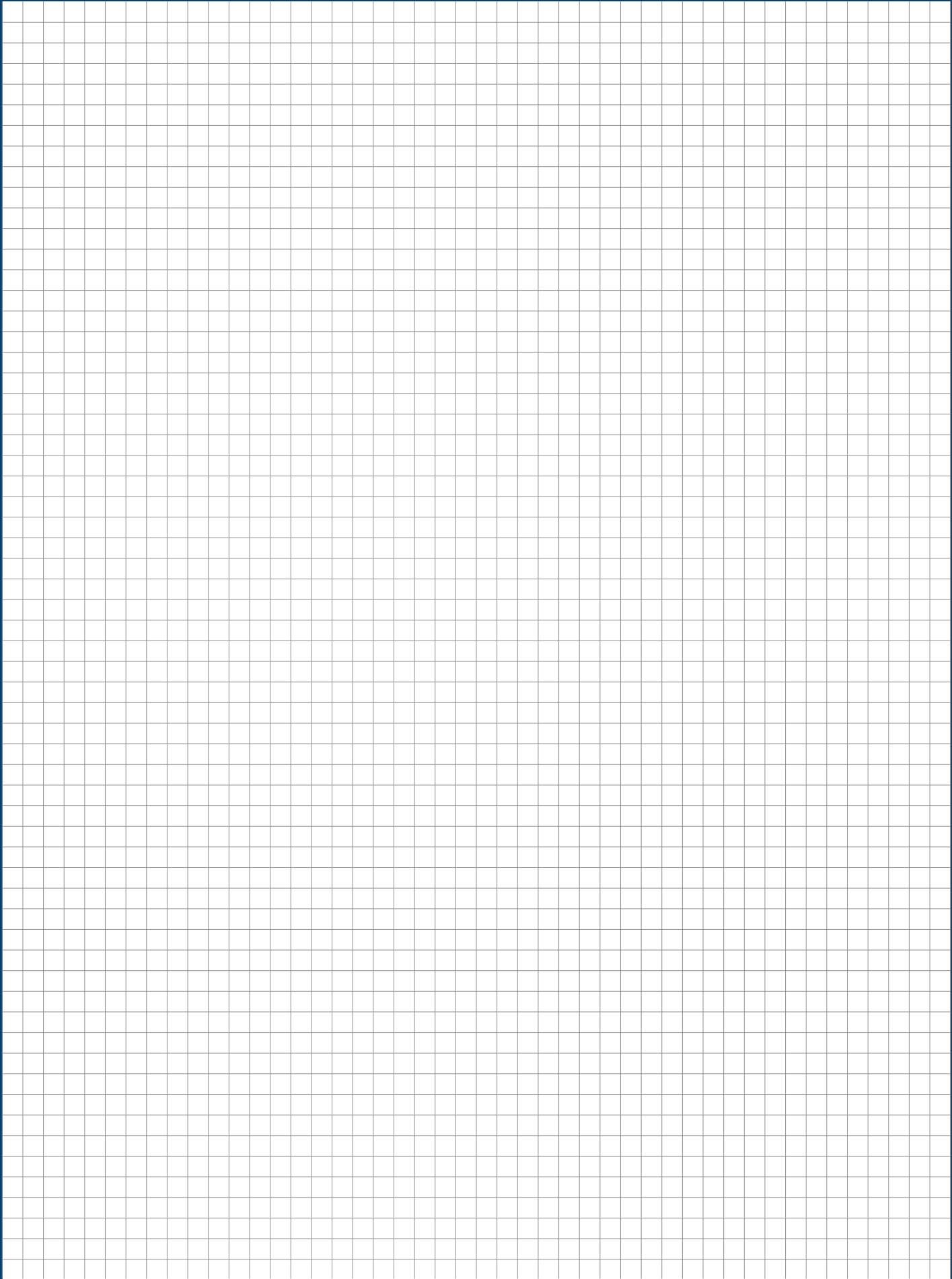


DUROSOF[®] PRODUCT MATRIX

** From sunflower, rapeseed or castor oil*

PRODUCT NAME	DUROSOF GMO	DUROSOF GMS	DUROSOF GMS-SG	DUROSOF GML-SG	DUROSOF PG4-O	DUROSOF PG4L-SG	DUROSOF PG10-O	DUROSOF PG10L-SG	DUROSOF PG10CY-MB
INCI	GLYCERYL MONO OLEATE	GLYCERYL MONO STEARATE	GLYCERYL MONO STEARATE	GLYCERYL MONO LAURATE	POLYGLYCERYL 4 OLEATE	POLYGLYCERYL 4 LAURATE	POLYGLYCERYL 10 OLEATE	POLYGLYCERYL 10 LAURATE	POLYGLYCERYL 10 CAPRYLATE
FUNCTION	EMOLLIENT	THICKENER	RSPO SG THICKENER	RSPO SG EMOLLIENT	EMULSIFIER	RSPO SG EMULSIFIER	MID HLB EMULSIFIER	RSPO SG MID/HIGH HLB EMULSIFIER	SOLUBILISER
DERIVED FROM	SUNFLOWER SEED OIL	RAPESEED OIL	RSPO SG PALM OIL	RSPO SG PALM KERNEL OIL	SUNFLOWER SEED OIL	RSPO SG PALM KERNEL OIL	SUNFLOWER SEED OIL	RSPO SG PALM KERNEL OIL	PALM KERNEL OIL
	RAPESEED OIL	RAPESEED OIL	RAPESEED OIL	RAPESEED OIL	SUNFLOWER OIL*	SUNFLOWER OIL*	SUNFLOWER OIL*	SUNFLOWER OIL*	SUNFLOWER OIL*
HLB	4	4	5	6	4-6	8-10	8-10	11-12	13-14
APPEARANCE	GOLDEN VISCOUS LIQUID	OFF-WHITE PASTILLE	OFF-WHITE PASTILLE	OFF WHITE SEMI-SOLID	GOLDEN VISCOUS LIQUID	GOLDEN VISCOUS LIQUID	GOLDEN VISCOUS LIQUID	GOLDEN VISCOUS LIQUID	GOLDEN VISCOUS LIQUID
COLD PROCESSABLE	-	-	-	-	✓	✓	-	-	-
PHASE COMPATIBILITY	OIL	OIL	OIL	OIL	OIL	WATER	WATER	WATER	WATER
EO FREE	✓	✓	✓	✓	✓	✓	✓	✓	✓
PEG FREE	✓	✓	✓	✓	✓	✓	✓	✓	✓
RSPO CERTIFIED	-	-			-		-		MASS BALANCE

NOTES



CONTACT US

IF YOU HAVE A SPECIFIC PROJECT,
OR WOULD LIKE MORE INFORMATION
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