



**COSMOS
APPROVED**



WorléeSuspens Eco

Take advantage of what nature offers to improve the stabilization of your formulation and achieve incredible performance with our new bio-based suspending agent. Choose WorléeSuspens Eco for a more sustainable, high-quality cosmetic product that your customers will love.

Your benefits at a glance:

- ✓ Stabilization of insoluble ingredients
- ✓ Transparency comparable to synthetic suspending agents
- ✓ Improves the flow properties of Xanthan Gum
- ✓ Advantageous sensory properties
- ✓ Ready to use and pre-activated
- ✓ Tolerant to pH value, salt and temperature
- ✓ Natural Origin Content 99.4%
- ✓ Eco-friendly and biodegradable
- ✓ IECSC & IECIC listed
- ✓ COSMOS validated



About WorléeSuspens Eco

WorléeSuspens Eco is the perfect solution for those looking to create sustainable, high-quality cosmetic products. Made from bacterial cellulose obtained through a non-GMO fermentation process, this bio-based suspending agent improves the stability of insoluble ingredients and enhances sensory properties, resulting in a transparent, uniform formulation.

WorléeSuspens Eco creates a three-dimensional network of cellulose fibers, providing yield stress without affecting viscosity. This ready-to-use product is easily incorporated into any formulation with moderate stirring. The combination of Xanthan Gum with WorléeSuspens Eco significantly improves the flow properties.

Not only is WorléeSuspens Eco environmentally friendly and biodegradable, it is also COSMOS validated and microplastic free. This makes it a great choice for natural cosmetics that prioritize sustainability and high performance.



Cleansing



	WorléeSuspens Eco
INCI	Aqua, Glycerin, Cellulose, Sodium Benzoate, Cellulose Gum, Citric Acid
pH Value	3.0 - 5.0
NOC** (incl. Water, ISO 16128)	99.4%
NOC (without water, ISO 16128)	90.2%
Viscosity (25°C; Rheometer)	< 5,000 mPas
Appearance	white to yellowish viscous liquid

**NOC stands as an abbreviation for Natural Origin Content

Formulation

Scalp Cleansing Shampoo with Organic Hemp Oil

Say goodbye to dry, itchy scalp with this innovative shampoo enriched with Worlee**Soft Beads Hemp Oil** and stabilized by Worlée**Suspens Eco**. Create the ultimate shampoo with Worlee**Soft Beads Hemp Oil** and Worlée**Suspens Eco**. Your customers will love the results, and you'll love the peace of mind that comes with using sustainable, high-quality ingredients.

CLEANSING | SHAMPOO
RR-12-54-00

Phase	Ingredient	INCI (EU)	Supplier	%
A	Water	Aqua	/	42.30
A	Worlée Suspens Eco	Aqua, Glycerin, Cellulose, Sodium Benzoate, Cellulose Gum, Citric Acid	Worlée-Chemie GmbH	5.00
A	Euxyl® PE 9010	Phenoxyethanol (and) Ethylhexylglycerin	Ashland Inc.	0.70
B	ZETESOL NL-2U	Sodium Laureth Sulfate	Zschimmer & Schwarz	35.00
B	Plantacare® 810 UP	Caprylyl/Capryl Glucoside	BASF Personal Care and Nutrition GmbH	5.00
B	Tego Betain® F 50	Cocamidopropyl Betaine	Evonik Personal Care	2.50
B	Fragrance	Parfum	Frey & Lau	0.20
C	Glycerin	Glycerin	div.	5.00
C	Jaguar® Excel	Guar Hydroxypropyl Trimonium Chloride	Solvay	0.80
D	Citric Acid 50%aq solution	Citric Acid	div.	0.30
D	Sodium Chloride	Sodium Chloride	div.	2.20
E	Worlée Soft Beads HempOil 1H2-M	Mannitol, Microcrystalline Cellulose, Cannabis Sativa Seed Oil, Squalane, CI 77492, CI 77007, Tocopherol, Algin, Kaolin	Worlée-Chemie GmbH	1.00
Total:				100.00

Processing instructions

- Effective in surfactant-based formulations
- Usage Level: approx. 2.0 – 10.0 wt%*
- Cold processable
- Disperse in water first
- High shear rates are not required
- Avoid too much air uptake
- No incompatibilities at a pH between 4 – 12
- Temperature stable up to 45°C
- The usage level to achieve perfect stabilizing properties depends on:
 - Surfactant system
 - Surfactant concentration
 - Particle size

*A usage concentration of max. 5% is recommended for salt-thickened and surfactant-containing (anionic) systems.

United for a sustainable development



RESPONSIBLE CARE
OUR COMMITMENT TO SUSTAINABILITY



The values that guide our actions

We are committed to forward-looking and prudent environmental protection and to preventive and comprehensive occupational health and safety as a corporate goal.

We are convinced, that the natural goods of water, air, and soil must be treated carefully as a part of our responsible business practices. In this way, the ecosystem in which we live can be preserved as the basis of life for future generations as well. This particularly applies to the economical and efficient use of energy and natural resources.

We stand by our responsibility to provide safe and secure production, storage, and transport. We ensure that our products are handled conscientiously along the entire value-added chain.

What makes WorléeSuspens Eco so sustainable?



99.4% Natural Origin Content acc. to ISO 16128



Not affected by the restriction on microplastics acc. to current ECHA Proposal



Vegan



Non-GMO



Cruelty free



Palmoil free

Let's work together!

You are interested and need further information?
Feel free to contact us.

Worlée-Chemie GmbH
Grusonstrasse 26
22113 Hamburg, Germany
Tel. +49 (0) 40 73333 0
cosmetics@worlee.de

www.worlee.de