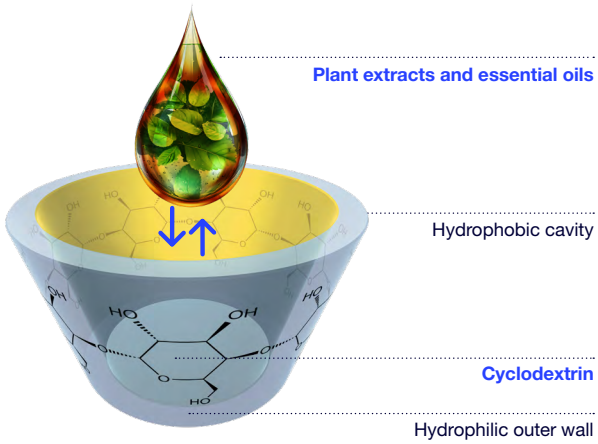
CAVAMAX® and CAVASOL® cyclodextrins
Sustainable solutions for agriculture

Cyclodextrins open up new possibilities in sustainable agriculture. They improve the solubility, stability, and controlled release of active ingredients, making crop protection more efficient and environmentally friendly. CAVAMAX® and CAVASOL® help increase yields while reducing environmental impact — and they are biodegradable or free from microplastics.

Controlled-release complex of cyclodextrin and essential oil



CAVAMAX® and CAVASOL® cyclodextrins – smart carriers for agrochemicals

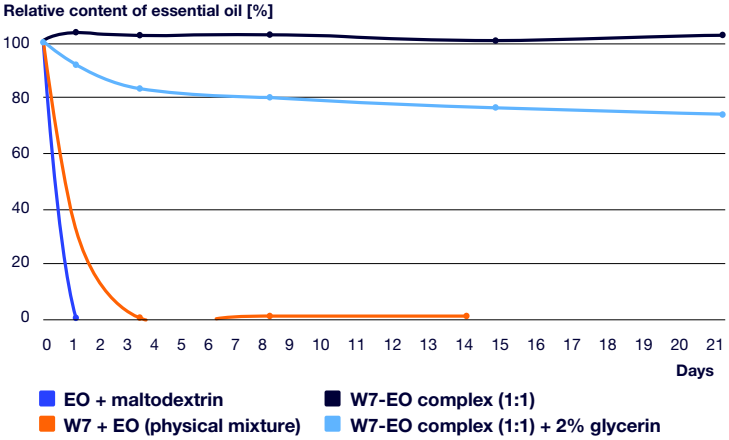
Cyclodextrins are natural, cyclic oligosaccharides that act as carriers for active ingredients in agrochemical formulations. Through a reversible encapsulation process, they temporarily bind organic molecules, significantly improving water solubility and boosting overall performance in the field.

Product	CD complex	Biodecomposition
CAVAMAX® W6 CAVAMAX® W7	Water-dispersible	Readily biodegradable
CAVASOL® W7 HP CAVASOL® W7 M	Water-soluble	Non-microplastic

Targeted release of volatile, eco-friendly actives with cyclodextrins

Essential oils are effective natural agents in sustainable crop protection, but their field performance is limited by their volatility. Cyclodextrin-based formulations solve this drawback by encapsulating them in a reversible complex and, along with the other formulation components such as humectants, enabling controlled, prolonged release in real-world conditions.

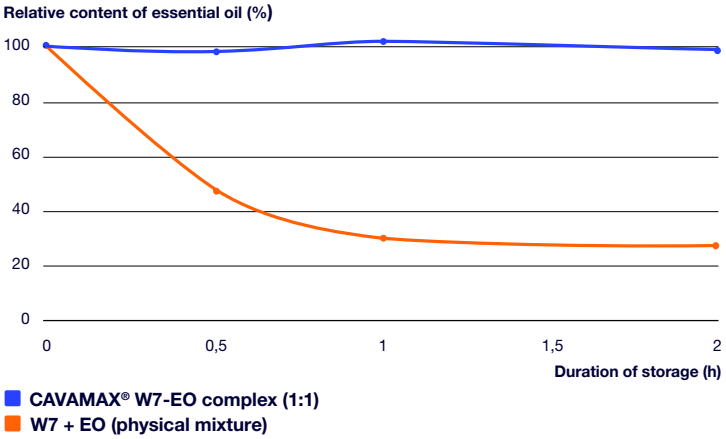
Tailored release of essential oils enabled by CAVAMAX® W7 complexes
EO release in climate chamber (35 °C, 60% rh)



Enhanced stability of sensitive actives with cyclodextrins

Cyclodextrin encapsulation significantly improves the heat and UV stability of sensitive ingredients, ensuring longer shelf life, better field performance, and reduced use levels of active ingredients. This makes it ideal for applications such as seed coatings, pellets, and solutions requiring high formulation stability.

SUNTEST stress test shows significantly improved protection
Stability of essential oil, complexed and uncomplexed, SUNTEST device (UV A+B, 45 °C)



WACKER

Creating tomorrow's solutions

Applications

Eco-friendly crop protection

Cyclodextrins support sustainable plant protection by improving water solubility, stability, and controlled release of natural actives — reducing environmental impact and providing longer-lasting efficacy. They also help with managing resistance for a more consistent performance.

Biostimulants and fertilizers

Cyclodextrins can boost the performance of biostimulants by improving nutrient solubility and absorption for healthier crop growth. They support soil microbiome balance and overall plant vitality, while enabling lower application rates and delivering dependable yields.

Smart and stable seed-coating solutions

Cyclodextrins enhance the integration and performance of active ingredients in seed treatments by improving solubility and formulation stability across processing, storage, and field application. They protect seeds from pests and pathogens, without affecting germination, while supporting long-term storage and precision agricultural practices through their reliable, long-lasting performance.

Green acaricides

Cyclodextrins enable sustainable and effective mite control across diverse agricultural settings. They support eco-friendly solutions based on essential oils and other natural actives. Controlled release enhances field performance, while the materials remain biodegradable, residue-free, safe and easy to apply. This technology is suitable for beekeeping, greenhouse crops, fruit trees, and ornamental plants.

Why our cyclodextrins are the perfect solution for you

- **Proven performance backed by data and field trials**
- **Tailored solutions for diverse agricultural environments**
- **Support from expert teams for formulation and application**
- **Outstanding quality and reliable supplier**

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