

Odour Absorber

CAMDsorb®

Technical Brochure



A photograph of several lavender plants with green stems and small blue flowers, set against a light background. The plants are arranged in a field-like pattern, with some in the foreground and others in the background.

Introduction

The odour absorber zinc ricinoleate was developed and patented by CAM-D Technologies.

Zinc ricinoleate is not effective on its own. Therefore it needs a stabilizing compound to be activated. Due to activation the molecular structure is changed, thus making adsorption possible.⁽¹⁾

CAM-D offers liquid concentrates as well as solid granulates which contain already activated zinc ricinoleate.

Activated zinc ricinoleate is able to efficiently bind and neutralize molecules causing displeasing odours:

- Organic acids
- Amines
- Ammonia
- Mercaptanes
- Thioethers (e.g.: Allicin, dimethylsulfide, ...)
- Hydrogen sulphide

Functional groups such as aldehydes and ketones which are often parts of perfumes, are not adsorbed.

Activated zinc ricinoleate is completely soluble in water and not toxic. It can be formulated into established mixtures and is available both in liquid and solid form.

Literature:

⁽¹⁾H. Kuhn, F. Müller, J. Peggau, R. Zekorn: The Mechanism of the Odor-Adsorption Effect of Zincricinoleate. A Molecular Dynamics Study. Journal of Surfactants and Detergents, 2000, 3, 335-343.

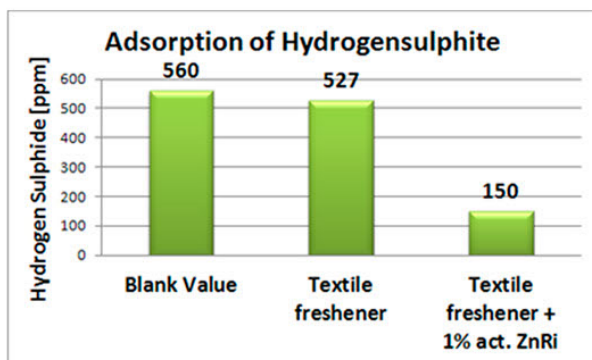
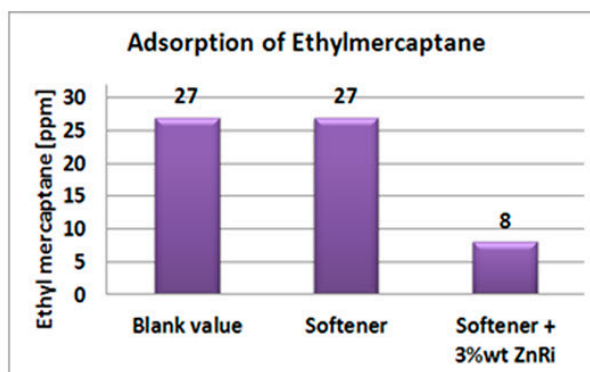
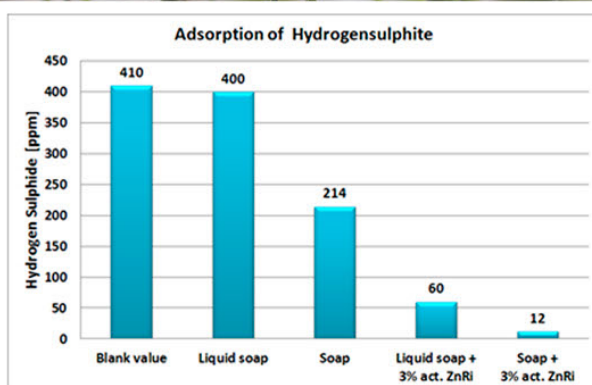
Chemical and physical properties

Property	CAMDsorb® L-*	CAMDsorb® S-*	CAMDsorb W-*
Form	liquid	powder/granulate	wax
Colour	yellowish	white	white
Smell	slightly soapy	neutral	slightly soapy
Decomposition Point		> 200° C	
Solubility		completely soluble in Water	
pH value (undiluted)		9-10	
pH value(diluted)		7-8	

Environmental and toxicological data

- Zinc ricinoleate: No danger for skin and/ or allergic people
- MGDA: Biodegradable, non-toxic, no bioaccumulation
- GLDA: Biodegradable, no acute or long term toxic effects, not sensitizing or irritating, not mutagenic, not teratogenic, biocidal effects
- HEDP: Not sensitizing or irritating, biodegradable, no bioaccumulation, high stability

Efficacy



Applications

Washing powder,
detergents,
soaps, deodorants
Automotive interior
Animal husbandry
Textiles
Filter
Air cleaning
Air condition
Cosmetics





Patents

European patent 08 868 267.9 / 2 222 684 by

CAM-D Technologies GmbH

"Interface active metal complexes to adsorb contaminants as well as the procedure of their generation"

European patent 08 868 589.6 / 2 222 685 by

CAM-D Technologies GmbH

"Interface active metal complexes on carrier material to adsorb contaminants as well as the procedure to generate suitable carrier materials"

US patent 12/809,778 by

CAM-D Technologies GmbH

"Interface active metal complexes to adsorb contaminants as well as the procedure of their generation"

A background image of lavender flowers in bloom, with two prominent stalks in the foreground and others blurred in the background. The flowers are a mix of purple and white.

Contact

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CAM-D Technologies was founded in April 2000 and is occupied with contract research for the chemical industry. The company develops new active ingredients targeting unpleasant odours and their adsorption for use in homecare and personal care products.

New ingredients can be added into many formulations, such as liquid detergents and washing powders. Further fields of application are cosmetics, filter- and textile-coatings.

Another expertise is molecular modeling for industrial research and development. Employing those innovative methods results in effective, cost-saving strategies of experiments, that are less time-consuming.

Simulations are used in the area of material science to develop new ingredients such as detergents (surfactants, emulsions), additives, polymers, catalysts and nano-materials.

It was also developed a mesoscopic simulation technique which allows the calculation and prediction of phase patterns of surfactant/water- or surfactant/water/oil-systems.

Simulations can be utilised in the field of medical and life science as well. CAM-D uses QSAR (Quantitative Structure Activity Relationship) to develop new active components.

www.cam-d.de