



# Flexisorb™ OD-500

High-Actives Zinc Ricinoleate dispersion

## Overview

- Highly concentrated zinc ricinoleate dispersion which is soluble in alcohol and polar organic solvents, and in aqueous surfactant mixtures
- Use as an Odor Control Agent in a range of applications
- High actives, low moisture complex, requires additional stabilizing ingredients
- Liquid form for compounding or spray application
- Effective in liquid, spray, fogging or mist applications
- Renewably sourced odor neutralizer that traps and absorbs odors, not a masking agent
- Not a bactericide, fungicide or sanitizer
- Compatible with fragrances and most formulating ingredients
- Effectively fixates a wide range of odorous compounds
- Binds with Organic waste and decomposition odors
- Captures odors associated with humans, animals, food, chemical processes and smoke
- Effective against smelly acids, amines, mercaptans and thioethers, including hydrogen sulfide and ammonia
- WERCS ID number: WPS1517092
- WERCS Validation number: WPS1517092

## Technical Information

Flexisorb OD-500 is a liquid zinc ricinoleate dispersion that can be formulated into a stable aqueous product when formulated with an appropriate surfactant system. Flexisorb OD-500 is an odor neutralizer, not an antimicrobial or chemical masking agent. More effective than related copper and magnesium salts of the same valence, Flexisorb OD-500 zinc ricinoleate forms unique fixating complexes that trap and absorb odors, and remain stable even if the treated substrate dries. Flexisorb OD-500 contains 75% biorenewable carbon.

## Applications

- Bathrooms and shower rooms
- Kitchen and food storage areas
- Automotive, RV and boat
- Waste cans, Garbage bags, Dumpsters
- Paints and coatings
- Litter and litter boxes
- Sewage plants, Land fills
- Stock yards, Paper plants

## Formulary

Use concentration of Flexisorb OD-500 in formulations depends on the application and the target odor causing substances, relating to the physical and chemical interactions with the odor causing materials and OD-500. Use concentrations of Flexisorb OD-500 vary from 0.1% to 2%.

As sold, OD-500 is alcohol soluble, but not water soluble. The use of an appropriate surfactant system is required to provide stable aqueous mixtures. Give us a call for assistance for your particular formulation requirements and composition.

Whether you're looking for a replacement product, or an ingredient for a specific attribute, give us a call. We can provide assistance based upon your particular formulation requirements and composition; please feel free to contact us.

## Typical Properties

PROPERTY	VALUE
Appearance	Clear to transparent, viscous, colorless to light amber liquid
Odor	Mild
Ionic character	Anionic
Zinc salt actives	50%
Solubility	Soluble in alcohol and polar organic solvents
Water solubility	Dispersible with surfactants
pH, 1:1 IPA/H <sub>2</sub> O	6-8
Density@25°C	1.01±0.01
Boiling point	>100°C
Flash point	Does not ignite below 100°C
Storage	Stable to freezing
Shelf life	12 months

## Packaging and Handling

Flexisorb OD-500 is available in totes (Net Wt. 2205 lbs), 55 gallon plastic drums (Net Wt. 441 lbs) and 5 gallon pails (Net Wt. 40 lbs).

Refer to the Safety Data Sheet (SDS) for information on the safe use, handling, and disposal of this product.

DOT Classification: Non-Regulated

**Please refer to back page for important information**

## **Flexisorb OD-500: Renewably Sourced Odor Neutralizer**

Flexisorb OD-500 is a renewably sourced odor neutralizer that traps and absorbs odors. It is not an antimicrobial or chemical odor masking agent. Flexisorb OD-500 is a complex zinc ricinoleate which is made of renewably sourced and purified ingredients, in an alcohol and aqueous surfactant soluble dispersion.

## **Flexisorb OD-500: Effective Odor Neutralization**

The mechanism for odor fixation by Flexisorb OD-500 is complicated, being a combination of adsorption, complex formation, and in some instances a chemical formation such as mercaptans to mercaptides. More effective than related copper and magnesium salts of the same valence, and related organic acids of the same carbon number, Flexisorb OD-500 zinc ricinoleate forms unique fixating complexes specific to the odor causing substances that cause intensive odor with low odor thresholds such as low molecular weight organic acids, amines, mercaptans, dialkyl sulfides, dialkyl disulfides,  $\text{NH}_3$ ,  $\text{H}_2\text{S}$ , and  $\text{SO}_2$ .

## **Flexisorb OD-500: Range of Application**

Flexisorb OD-500 traps, absorbs, and fixes odor-intensive organic substances. Substances with low odor thresholds with sulfur - such as thiols and thioethers, or nitrogen-containing functional groups such as ammonia and dimethylamine, low molecular weight carboxylic acids such as isovaleric acid and hexenoic acid are effectively neutralized by OD-500. Odorous food and animal decomposition products such as putrescine and cadaverine, and industrial by-products such as hydrogen sulfide and sulfur dioxide and others are effectively controlled by Flexisorb OD-500 and formulations that contain it.

This information relates only to the specific material referred to herein and not to its use in combination with any other material or in any process, unless explicitly stated herein. Such information is, to the best of our knowledge and belief, accurate and reliable as of the date compiled; however, no warranty, guarantee or other representation is made as to its accuracy, reliability, or completeness, or regarding any liabilities arising from others' intellectual property rights. ID# 20250711. revision 3.