



Flexisorb™ OD-300

Readily emulsifiable Zinc ricinoleate dispersion

Overview

- Highly concentrated zinc ricinoleate dispersion which readily forms a microemulsion when diluted in water
- Use as a stand alone odor control agent, or as an additive in hard and soft surface cleaning formulations
- High actives, readily emulsifiable zinc ricinoleate complex, may require 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: WPS1144125
- WERCS Validation number: WPS1144125

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

Technical Information

Flexisorb OD-300 is a liquid zinc ricinoleate dispersion that readily forms a microemulsion when diluted in water, but may require additional stabilizing ingredients depending on the desired end-use concentration. Flexisorb OD-300 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-300 zinc ricinoleate forms unique fixating complexes that trap and absorb odor causing substances, and remain stable even if the treated substrate dries. Flexisorb OD-300 contains 68% biorenewable carbon.

Formulary

Mix before use. Flexisorb OD-300 may stratify upon standing.

Flexisorb OD-300 is readily dispersible in water, forming a micro-emulsion in neutral to slightly alkaline solutions. Flexisorb OD-300 dilutions <15% (wt% as supplied) require additional stabilizers to maintain long term shelf-life clarity. Give us a call for formulation guidance in producing concentrates that maintain extended shelf-life clarity.

If a fragrance is desired, some fragrance oils can be pre-dissolved in Flexisorb OD-300, while others may require their own emulsification package.

Use of deionized water and a preservative is recommended. Nipacide BIT 20, Proxel GXL and Verigard 19S have been found to provide adequate protection. Typical active preservative concentration is 0.05-0.5% weight percent. Preservative effectiveness should be determined by the formulator.

Typical Properties

PROPERTY	VALUE
Appearance	Clear to transparent, viscous, colorless to light amber liquid
Odor	Mild
Ionic character	Anionic
Zinc salt actives	30%
Solubility in water	Dispersible
Water solubility	Dispersible with surfactants
pH, as is	9-11
Density@25°C	1.05±0.02
Boiling point	>100°C
Flash point	Does not ignite below 100°C
Storage	Protect from freezing
Shelf life	12 months

Packaging and Handling

Flexisorb OD-300 is available in totes (Net Wt. 2250 lbs), 55 gallon plastic drums (Net Wt. 450 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

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.

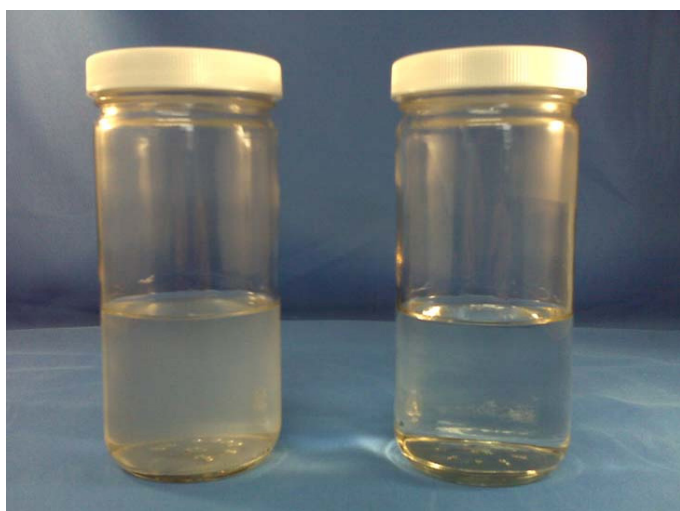
Please refer to back page for important information

Flexisorb OD-300: Renewably Sourced Odor Neutralizer

Flexisorb OD-300 is a renewably sourced odor neutralizer that traps and absorbs odors. It is not an antimicrobial or chemical odor masking agent. Flexisorb OD-300 is a complex zinc ricinoleate salt of renewably sourced and purified ingredients, in readily emulsifiable dispersion.

Designed for ease of use, Flexisorb OD-300 readily emulsifies in water to form a stable micro-emulsion. For extended shelf-life preparations, additional stabilizer and preservative may be needed. Give us a call for OD-300 formulation guidance.

The example below illustrates the exceptional dilution stability and clarity versus a competitor's zinc salt odor absorber at 0.25% active.



Competitor RTU **Flexisorb OD-300 RTU**
0.25% zinc salt & 1.0% Baypure CX-100(34)TM,
5 months at Ambient Temperature

Flexisorb OD-300: Effective Odor Neutralization

The mechanism for odor fixation by Flexisorb OD-300 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-300 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, NH_3 , H_2S and SO_2 .

Flexisorb OD-300: Range of Application

Flexisorb OD-300 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-300. 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-300 and formulations that contain it.

The following example formulation illustrates the flexibility of Flexisorb OD-300:

Ready-to-Use Odor Absorber	
Ingredient	Wt. %
Flexisorb OD-300	0.5-2.0
Fragrance	to 0.05%
Water	to 100%
Preservative ⁽¹⁾	0.05-0.20
Baypure CX-100(34) TM	1.0
Ready-to-Use	
Add ingredients in order listed.	
Appearance	Clear liquid
pH	10.6
⁽¹⁾ Nipacide BIT 20, VeriGuard 19S, and Proxel GXL have been found to provide adequate protection. Preservative effectiveness should be determined by the formulator.	

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# 20250710. revision 3.