



# Flexisorb™ OD-202

Carpet stain and resoil resistant Zinc salt dispersion

## Overview

- Concentrated zinc salt dispersion with anti-resoil ingredients readily dilutes in water
- Use as a Stand Alone Soft Surface Odor Control Agent, or as an Additive in Carpet and Upholstery cleaning formulations
- Liquid form for compounding or spray application
- Effective in liquid, spray, fogging or mist applications
- Naturally renewable 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: WPS1255867
- WERCS Valication number: 1255867

## Applications

- Carpet cleaners and deodorizers
- Upholstery cleaners and deodorizers
- Automotive, RV and boat
- Apparel fabrics
- Textile mill applications
- Odor control cleaning products

## Technical Information

Flexisorb OD-202 is an optimized Odor Control Agent for use on Carpeting and Upholstered surfaces. Containing stain and resoil resistant ingredients, OD-202 is a stabilized liquid zinc salt dispersion that readily dilutes in water. Flexisorb OD-202 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-202 zinc salt forms unique fixating complexes that trap and absorb odor causing substances, and remain stable even if the treated substrate dries.

Flexisorb OD-202 is formulated with soil and stain resist agents that prevent sticky and tacky residues that attract soil on carpeting and upholstery.

## Formulary

Flexisorb OD-202 is readily dilutable in water, diluting to a clear solution in water at any concentration. Deionized water is recommended for improved shelf-life. If a fragrance is desired, some fragrance oils can be pre-dissolved in Flexisorb OD-202, while others may require their own emulsification package. Give us a call for formulation guidance in producing concentrates and ready-to-use products that maintain extended shelf-life clarity and for incorporating fragrances.

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, amber liquid
Odor	Mild
Ionic character	Anionic
Water solubility	Dilutes to clear solution
pH (1%)	7.5±1.0
Density@25°C	1.09±0.02
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-202 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.

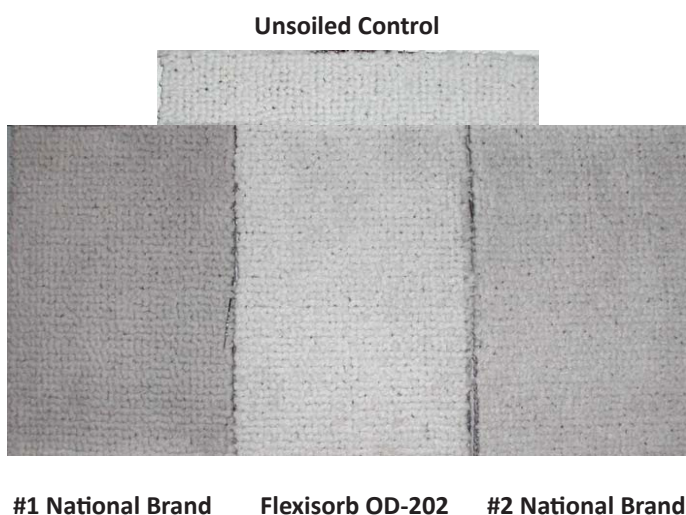
*Please refer to back page for important information*

## Flexisorb OD-202: Natural Odor Neutralizer

Flexisorb OD-202 is a naturally renewable odor neutralizer that traps and absorbs odors...not an antimicrobial or chemical odor masking agent. Flexisorb OD-202 is a complex zinc salt of purified and naturally renewable ingredients, in a readily water dilutable dispersion.

Designed for ease of use, Flexisorb OD-202 readily dilutes in water to form a clear solution at any concentration in neutral to acidic formulations. For extended shelf-life preparations, additional stabilizer and preservative may be needed. Give us a call for OD-202 formulation guidance.

The example below illustrates the exceptional stain and resoil protection of Carpet Odor Removal formulations.



**The illustration clearly demonstrates the superior performance of the anti-resoil chemistry in Flexisorb OD-202.**

In evaluating the anti-resoil performance of Flexisorb OD-202 containing formulations, ASTM Test Method D6540 was followed to soil and compare results. In laboratory tests comparing commercially available odor removal products, it is clear that Flexisorb OD-202 outperformed all competitive products in resoil protection.

## Flexisorb OD-202: Effective Odor Neutralization

The mechanism for odor fixation by Flexisorb OD-202 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-202 zinc salt 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-202 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-202. 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-202 and formulations that contain it.

In the example formulation below, a formulation of Flexisorb OD-202 surpasses National Brands in performance:

Ready-to-Use Odor Absorber for Carpeting and Upholstery	
Ingredient	Wt. %
Flexisorb OD-202	1-7
Fragrance	to 0.05%
Water	to 100%
Preservative <sup>(1)</sup>	1.0
Ready-to-Use	
Mix ingredients in order listed.	
Appearance	Clear liquid
pH	6.3 (5% OD-202)
<sup>(1)</sup> Nipacide BIT 20	

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# 20200217