

## Itaconix® ZINADOR™ 22L

### New easy-to-use odor neutralizer, 100% bio-based

Use Itaconix® ZINADOR™ 22L for easy and cost-effective neutralization of odors. Itaconix® ZINADOR™ 22L is a polymeric zinc itaconate complex that is 100% bio-based.

Applications	Advantages	Physical & Chemical Properties
<ul style="list-style-type: none"> <li>Liquid laundry detergents, especially for sports-wear and industrial clothing</li> <li>Air fresheners</li> <li>Carpet &amp; upholstery cleaners</li> <li>Bathroom &amp; surface cleaners</li> <li>Pet care</li> <li>Personal care products</li> <li>Wastewater &amp; sewage treatment</li> <li>Waste treatment &amp; landfill facilities</li> <li>Animal &amp; agriculture waste containment sites</li> </ul>	<ul style="list-style-type: none"> <li>Effective on odors related to hydrogen sulfide, mercaptans, ammonia and body odor</li> <li>Readily soluble in liquid formulations without additives</li> <li>Stable in hard water without additives</li> <li>Stable from pH 2 to pH 11</li> <li>Dries to crystal; no oily residues or need for embrittling agents</li> <li>Does not cause foaming; no need for anti-foaming agents</li> <li>No odor in use or from residues</li> <li>Good temperature stability</li> <li>100% bio-based</li> </ul>	CAS# 1662663-05-9
		pH 7.9
		Odor none
		Avg. molecular weight (Mn) 5500 g/mole
		% Active zinc 2%
		Chemical nature poly(itaconic acid), Na, K, Zn salt
		Appearance clear yellow liquid
		Viscosity <100 cP
		Specific gravity 1.17 g/cm <sup>3</sup>
		Solid content 26%
<b>Recommended use</b>	<b>1 to 5%</b>	

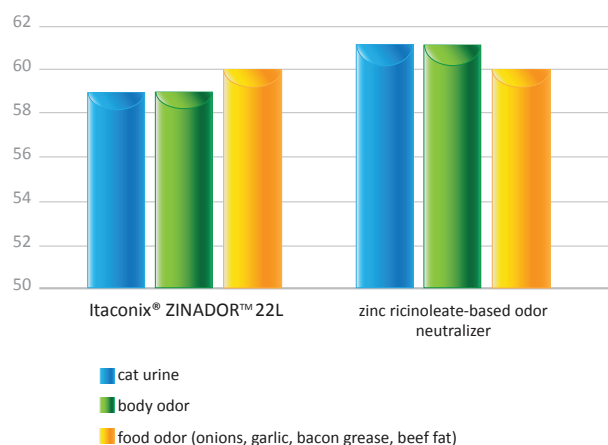
### New & improved technology for odor neutralization

Itaconix® ZINADOR™ 22L is a major advance in odor neutralization. Zinc complexes are widely used to neutralize odors caused by hydrogen sulfide, mercaptans, thioethers, isovaleric acid and ammonia. Itaconix® ZINADOR™ 22L is a new, easier-to-use and more cost-effective approach to formulating zinc complexes into home and industrial products.

Independent laboratory testing confirms that Itaconix® ZINADOR™ 22L performs equal to or better than the current leading zinc-based technology at neutralizing food odors, cat urine, and body odor.

Itaconix® ZINADOR™ 22L is a 100% bio-based product that delivers major new formulating, use, and cost advantages due to its ready water solubility and lack of residual deposits after use. No surfactants are added to the product or needed in end-use formulations. In addition, the product has no odor, does not cause foaming, and dries to a crystal, so no masking, anti-foaming or embrittling agents are needed.

Odor Reduction Score



Lower score indicates better odor removal

Source: Sterling Laboratories, data available upon request

### Better stability

Itaconix® ZINADOR™ 22L is stable over a broad pH range and high levels of water hardness. Current leading zinc-based technology requires separate products for different pH ranges and added chelation to protect products from hard water.

Itaconix® ZINADOR™ 22L is compatible with leading non-ionic surfactants, anionic surfactants, fragrances, and hydrogen peroxide. It is not compatible with sodium hypochlorite.

Itaconix® ZINADOR™ 22L can be transported and stored at up to 40°C. In end-use formulations, the product is stable up to 60°C.

<b>pH</b>	stable from 2 to 11
<b>Water</b>	up to 400 ppm
<b>Hardness</b>	(for a 5% solution at pH 8)
<b>Surfactant</b>	stable with leading non-ionic and anionic surfactants
<b>Fragrance</b>	stable
<b>Temperature</b>	stable for storage and transport up to 40° C, stable to freezing stable in use up to 60° C
<b>Bleach</b>	sodium hypochlorite - not compatible hydrogen peroxide - compatible

### Easier to formulate, better performance

Formulating with Itaconix® ZINADOR™ 22L is easier and more effective than current leading zinc-based technology. With Itaconix® ZINADOR™ 22L, product claims and performance for odor neutralization are achieved without the need for adding:

- surfactants
- solvents
- emulsifiers
- chelants
- embrittling agents
- anti-foaming agents

Formulations are simpler, work across broad pH ranges, and do not leave problematic residues.

Ingredients	Aqueous odor absorber formulation	
	Typical w/w%	Itaconix® ZINADOR™ 22L w/w%
Itaconix® ZINADOR™ 22L	0.0	2.5 (0.05% zinc)
50% zinc ricinoleate	1.0 (0.05% zinc)	0.0
Anionic surfactant/emulsifier	6.0	0.0
Phosphonic acid (DTPMP), 32%	2.5	0.0
Triethanolamine	0.6	0.0
DI Water	89.9	97.5

### Samples available on request

Please e-mail request to: [samples@itaconix.com](mailto:samples@itaconix.com)

### To request information on ordering quantities and pricing

Please call: +1 (603) 775-4400 or e-mail: [sales@itaconix.com](mailto:sales@itaconix.com)



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