

# Itaconix® ONZ™ 400

#### Plant-based odor neutralization

Itaconix® ONZ™ 400 is a plant-based polymeric zinc complex odor neutralizer that delivers unmatched formulating, use, and cost advantages. It has excellent odor neutralization, is highly water soluble, and leaves no residual deposits upon drying. Itaconix® ONZ™ 400 has more favorable compatibility in liquid formulations due its ionic stability in comparison to Itaconix® ONZ™ 100. Itaconix® ONZ™ 400 does not require surfactants, chelants, or solubilizers to formulate and has excellent temperature and pH stability, making it a cost-effective choice for odor neutralization.

#### Applications:

- Liquid laundry detergents, especially for sportswear and industrial clothing
- Urine odor control
- Pet care
- Carpet & upholstery cleaners
- Hard surface cleaners
- Bathroom cleaners
- Air fresheners
- Wastewater & sewage treatment
- Waste treatment & landfill facilities
- Janitorial service cleaners

### Advantages:

- Neutralize odors fast & permanent
- Effective on odors related to urine, hydrogen sulfide, mercaptans, ammonia and body odor
- Easy to use in liquid formulations
- Plant-based
- Biodegradable
- Stable from pH 1 12
- Dries to crystal; no oily residues or need for embrittling agents

Physical & Chemical Properties	
CAS#	2220235-78-7
Active zinc	3.5wt%
рН	5.8
Odor	Faint, pleasant
Average molecular weight (Mn)	4300 g/mole
% Active	30.5
Chemical class	Poly(itaconic acid-co-AMPS, sodium salt, zinc salt)
Preservative	Potassium sorbate
Appearance	Clear to slightly hazy yellow liquid
Density	1.2 kg/L

# Plant-based freshness

Itaconix® ONZ™ 400 is the sustainable and cost-effective choice for odor neutralization. Neutralize fresh malodors at the source before being detected by the human nose. Effective against unpleasant odors caused by sulfides, mercaptans, amines, ammonia and body odor related molecules such as isovaleric acid and butyric acid. Very effective on urine, it is the top choice for carpet, fabric and upholstery cleaners and animal bedding such as cat boxes.



### Fast efficacy on major malodors

Itaconix® ONZ™ 400 acts by neutralizing volatile malodor molecules and prevent them from being detected by the human nose.

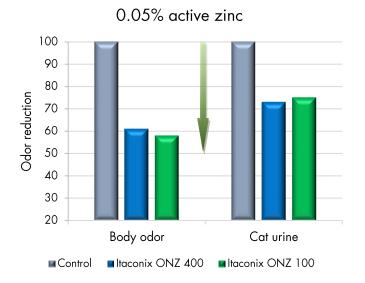
Itaconix® ONZ™ 400 binds quickly to neutralize odors caused by sulfides, mercaptans, thioethers, amines, ammonia, foot and body odor.

	Odor	Chemistry
<b>✓</b>	Onion-like	3-methyl-3-sulfanylhexan-1-ol
<b>√</b>	Sweaty	Isovaleric acid
<b>✓</b>	Cheesy	Butyric acid
<b>✓</b>	Urine	Ammonia
<b>✓</b>	Feces	3-methylindole
<b>√</b>	Foot odor	Propanoic acid
<b>√</b>	Foot odor	Methanethiol

## Works in everyday home care products

Itaconix® ONZ™ 400 is effective, leaves no residues, and is easy to formulate into all forms of home care applications, including laundry detergents, carpet cleaners, upholstery cleaners, pet products, hard surface cleaners, bathroom cleaners, and air fresheners.

Itaconix® ONZ™ 400 has more concentrated odor neutralization power and slightly better ionic stability than Itaconix® ONZ™ 100 for use in the most demanding formulations. It is the best choice for odor control in liquid consumer detergents for active sportswear and in institutional surface and carpet cleaners.



Independent laboratory testing confirms efficient reduction of body and cat urine odors with both Itaconix® ONZ™ 400 and Itaconix® ONZ™ 100 at an equivalent zinc activity of 0.05wt%.

#### Samples upon request

Please email request to: samples@itaconix.com

#### To request information on ordering quantities and pricing

Please call: +1 (603) 775-4400 or email: sales@itaconix.com



Polymers for Better Living"

2 Marin Way, Stratham, New Hampshire 03885, USA. • +1 (603) 775-4400.

www.itaconix.com

Nothing contained herein grants or extends a license, express or implied, in connection with patents, issued or pending, of the manufacturer or others. The information contained herein is based on the manufacturer's own study and the works of others. The manufacturer makes no warranties, expressed or implied, as to the accuracy, completeness, or adequacy of the information contained herein. The manufacturer shall not be liable (regardless of fault) to the vendee's employees, or anyone for the direct, special, or consequential damages arising out of or in connection with the accuracy, completeness, adequacy or furnishing of such information.