



VELAFRESH™ ZP

*Easy to use, bio-based odor neutralizers
that bind odors at the source*

Formulary for personal care applications





Polymers for Better Living™

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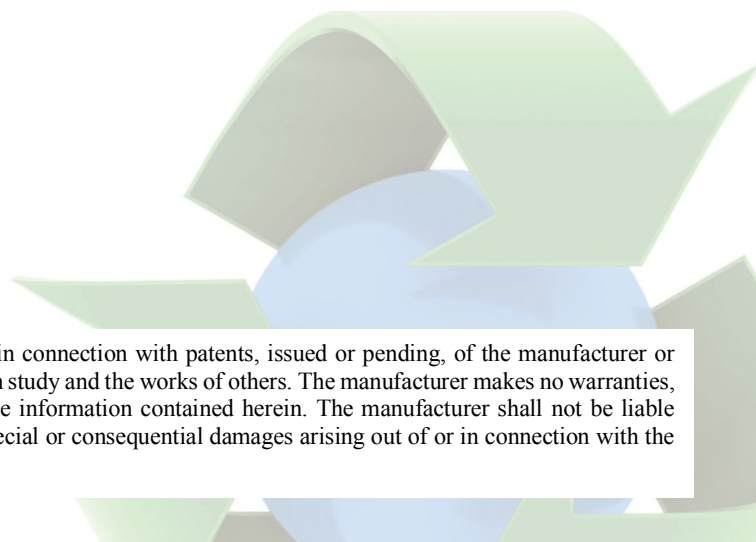
Itaconix Corporation

2 Marin Way Stratham NH 03885 USA

TEL: 603.775.4400

info@itaconix.com www.itaconix.com

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All-Natural Aluminum Free Deodorant Stick

Description

Long lasting fragrance free all-natural deodorant stick that neutralizes body odors at the source without leaving clothing stained.

Formulation and procedure

COMPONENT	WT. %	MIXING INSTRUCTIONS
1,3-Propanediol	61.0	Add to clean vessel with mixing
DI Water	25.5	Mix with VELAFRESH ZP20
Itaconix® VELAFRESH™ ZP20	6.0	Mix with Water and add dropwise to 1,3-Propanediol
Sodium Stearate	7.5	Add slowly once system is heated to 85-90°C
Fragrance	q.s.	Add at end before cooling

Physical Properties

White solid stick

Stability Testing

Passed 4 weeks at 40°C

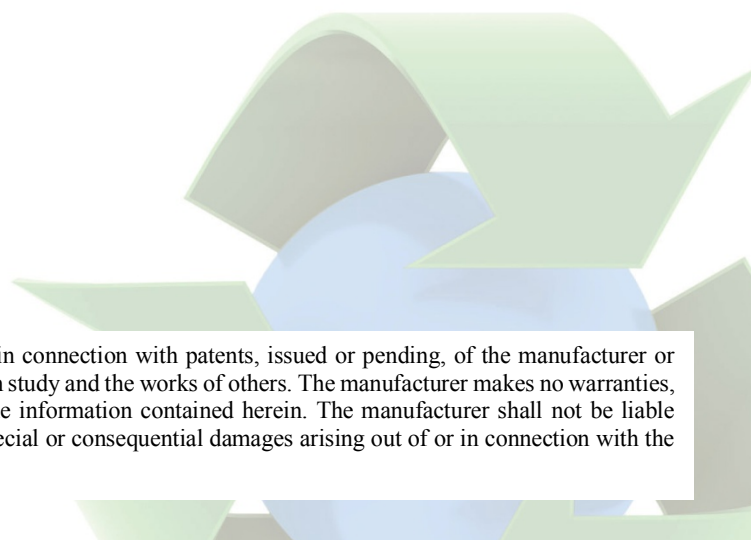
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Natural Aluminum Free Deodorant Stick

Description

Long lasting fragrance free natural deodorant stick that neutralizes body odors at the source without leaving clothing stained.

Formulation and procedure

COMPONENT	WT. %	MIXING INSTRUCTIONS
1,3-Propanediol	61.2	Add to clean vessel with mixing
DI Water	27.9	Mix with VELAFRESH™ ZP30
Itaconix® VELAFRESH™ ZP30	3.4	Mix with Water and add dropwise to 1,3-Propanediol
Sodium Stearate	7.5	Add slowly once system is heated to 85-90°C
Fragrance	q.s.	Add at end before cooling

Physical Properties

White solid stick

Stability Testing

Passed 4 weeks at 40°C

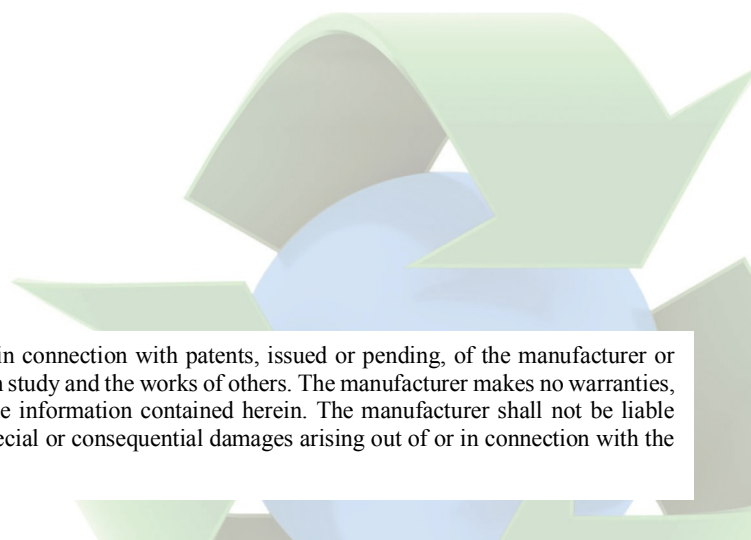
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All-Natural Roll-On Deodorant

Description

Long lasting quick drying all-natural roll-on deodorant stick that neutralizes body odors at the source without leaving clothing stained.

Formulation and procedure

COMPONENT	WT. %	MIXING INSTRUCTIONS
DI Water	77.7	Add to clean vessel with mixing
Ethanol 95%	16.8	Add dropwise to water, ZP20, and preservative mixture
Itaconix® VELAFRESH™ ZP20	4.0	Mix with Water and preservative
Hydroxyethylcellulose	1.5	Add slowly once system is heated to 40-50°C
Citric Acid dihydrate	q.s.	Add at end to adjust pH
Fragrance	q.s.	Add at end before cooling
Preservative	q.s.	Mix with water and ZP20

Physical Properties

Slightly yellow clear solution

Stability Testing

Stable at room temperature for two months

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Natural Roll-On Deodorant

Description

Long lasting quick drying natural roll-on deodorant stick that neutralizes body odors at the source without leaving clothing stained.

Formulation and procedure

COMPONENT	WT. %	MIXING INSTRUCTIONS
DI Water	79.2	Add to clean vessel with mixing
Ethanol 95%	16.8	Add dropwise to water, ZP20, and preservative mixture
Itaconix® VELAFRESH™ ZP30	3.0	Mix with Water and preservative
Hydroxyethylcellulose	1.0	Add slowly once system is heated to 40-50°C
Citric Acid dihydrate	q.s.	Add at end to adjust pH
Fragrance	q.s.	Add at end before cooling
Preservative	q.s.	Mix with water and ZP20

Physical Properties

Slightly yellow clear solution

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