



## Zemea®\* the Natural Choice... Purity and Renewable Performance

### The Pure and Petroleum-Free Glycol Choice for the Cosmetic & Personal Care Industry

INCI Name: Propanediol

#### Introduction

Zemea® propanediol is a colorless and highly pure glycol derived from a sustainable and renewable corn sugar fermentation process. Zemea® propanediol is the perfect glycol solution for formulations where non-petroleum based ingredients are desired. Benefits of Zemea® propanediol include its purity, lack of irritation and sensitization, and environmentally-friendly nature.

#### Applications

Zemea® propanediol can be used in cosmetic and personal care formulations to replace glycols such as propylene glycol (1,2-propanediol) and butylene glycol (1,3-/1,4-butanediol) or glycerin. Depending on your formulation needs, Zemea® propanediol can function as an emollient, humectant, hand-feel modifier or solvent. Zemea® propanediol is the ideal solvent for natural and biotechnology-derived extracts, replacing petroleum-based glycols with a sustainable, corn-derived alternative.

Zemea® propanediol has been incorporated successfully into a broad array of personal care product and color cosmetic formulations. All formulations have excellent aesthetics and sensory characteristics, and are stable to freeze/thaw and storage at 45°C for 3 months. Many formulation benefits have been achieved with Zemea® propanediol. For example, clear shampoo formulations have very low cloud points, excellent stability, improved foaming, and require less salt to adjust the viscosity as compared to other glycols.

## Zemea® renewably sourced™ propanediol

#### Dermal Testing

Zemea® propanediol, at concentrations up to 75%, has been tested in two independent skin patch tests in humans and has not produced skin irritation or sensitization reactions (report available upon request).

#### Benefits

- High Purity
- Made from corn sugar
- Produced from an environmentally sustainable and renewable process
- Non-Irritating/Non-Sensitizing
- Enhanced clarity

#### Regulatory Status

- CAS#: 504-63-2
- Listed with INCI, IUCLID, EINECS, ELINCS, OECD HPV, BEK, WGK, KECI, TSCA, AICS, DSL, IECSC, ENCS, ISHL and PICCS

#### For additional information or samples, please contact:

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