



ZEA DEODORANT PLATFORM

NEW NATURAL  
**ZEA DEODORANT PLATFORM**  
with PURE GLYCOLS FROM CORN SUGAR

An Exclusive Patent-Pending KDC Platform

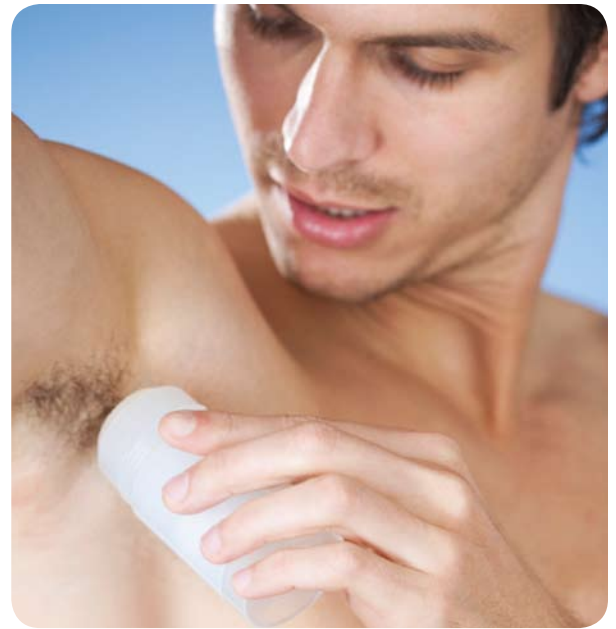


# THE BEST TECHNOLOGY IN NATURAL DEODORANTS

The Zea Deodorant Platform is the result of two and half years of intense research & development by the KDC Innovation Group.

Leveraging our experience in 'natural platform' development and our strengths as the largest contract manufacturer of deodorant sticks in North America, KDC is proud to offer the most effective petroleum-free deodorant base available today. Compatible with natural extracts and essential oils for a truly exceptional natural personal care product, the patent-pending Zea Deodorant Platform can be enhanced with features to meet your unique brand position.

**SAFE** ✓ **NATURAL** ✓ **SUSTAINABLE** ✓ **EFFICACIOUS** ✓ **TESTED** ✓

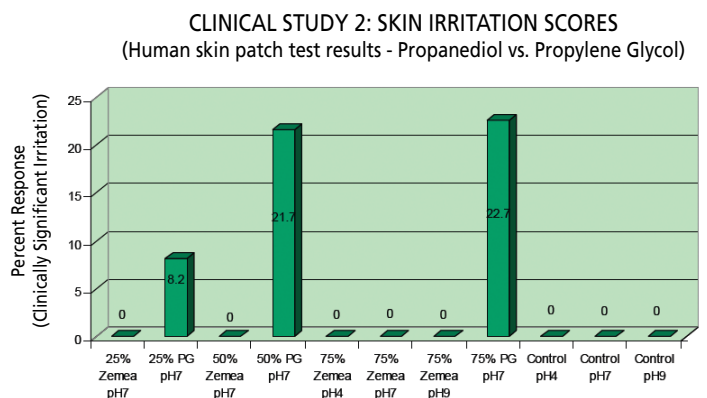
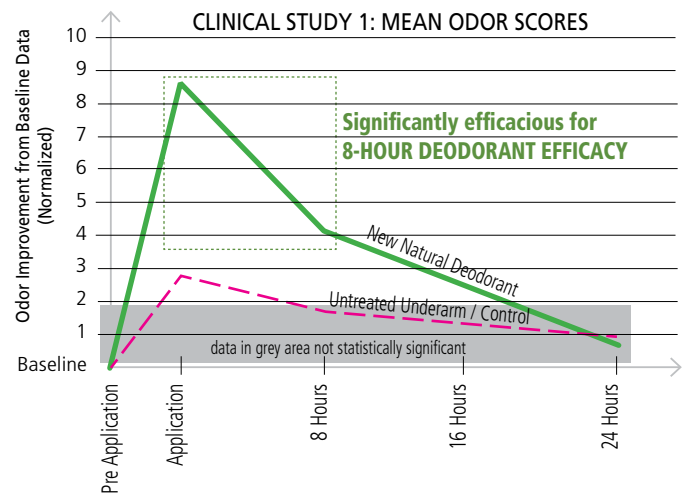


## NEW NATURAL DEODORANT with PURE GLYCOLS FROM CORN SUGAR

**PROPANEDIOL: RECOGNIZED BY THE NATURAL PERSONAL CARE INDUSTRY.** Derived from corn through a fermentation process, propanediol is safe and accepted as a natural ingredient by ECOCERT and the Natural Products Association (NPA).

**CLINICAL STUDY 1 - EFFICACIOUS BASE.** A third-party clinical study<sup>1</sup> on the unfragranced Zea Deodorant Platform substantiates efficacy for an 'All Day' (8-Hour) claim (see graph). Adding fragrance and/or other supportive active ingredients can increase the efficacy of the platform to deodorize, mask odor or provide a sensation of coolness or freshness in the application.

**CLINICAL STUDY 2 - LESS IRRITATING THAN PROPYLENE GLYCOL.** A study<sup>1</sup> performed by DuPont Tate & Lyle BioProducts LLC (manufacturers of corn-derived propanediol) shows skin irritability on human skin (in vivo) with propylene glycol, while no significant irritability was detected with propanediol (the main ingredient in the Zea Deodorant Platform). Propanediol's mildness is ideal for sensitive skin in deodorant applications.

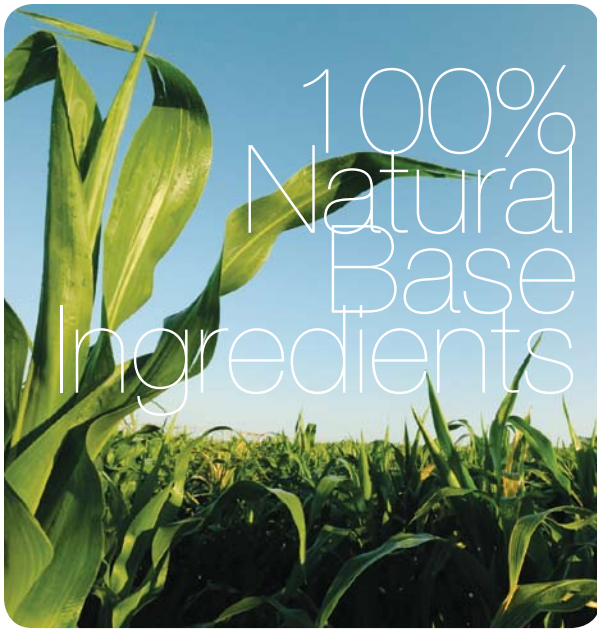


### THE BEST NATURAL DEODORANT BASE.

- **Excellent glide, no stickiness** (high % of glycerin in natural bases can cause an irritating drag on the skin).
- **No skin irritation** (compared to propylene glycol bases).
- **No staining or oily residue** (compared to oil/wax bases).
- **Effective for 8-hour work day.**
- **Pleasant texture and appearance.**
- **Ideal for sensitive skin.**
- **100% Natural when using natural extracts & fragrance.**
- **Available as a clear formula.**

**ADDITIONAL TESTING.** This platform has undergone — and succeeded — Stability, Microbiological and RIPT testing.<sup>1</sup>

<sup>1</sup> Additional information, product review or test results, on any KDC product claim can be provided by KDC upon request.



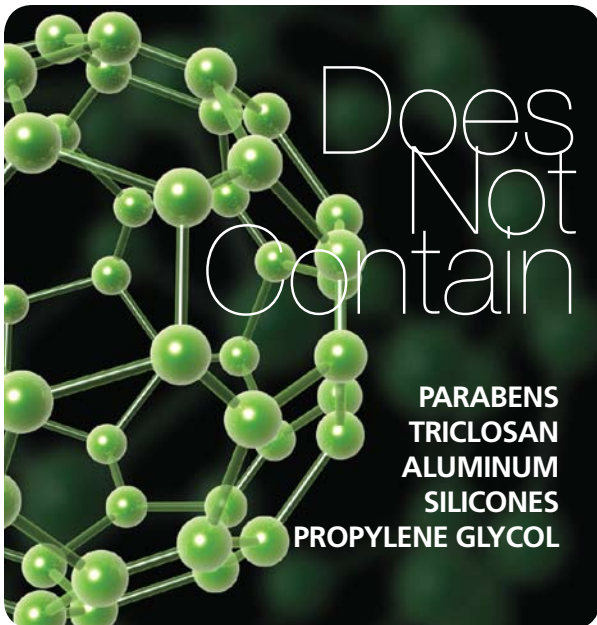
## A PREMIUM BLEND OF INGREDIENTS

KDC's patent-pending base formula is developed from 100% natural or naturally-derived ingredients.<sup>1</sup> These ingredients include:

- **CORN-DERIVED PROPANEDIOL:** This breakthrough ingredient provides a petroleum-free deodorant with a conventional delivery and high efficacy. Offers a comfortable glide and touch to the skin, without tackiness or irritation. In testing <sup>2</sup>, propanediol achieved similar anti-bacterial results to propylene glycol.
- **VEGETABLE GLYCERIN:** Glycerin complements the action and texture of the propanediol to form a skin-comfortable stick. Soothing and nourishing to the skin, glycerin is also a humectant for healthy-looking, supple skin.
- **GRAPEFRUIT SEED EXTRACT:** Natural anti-bacterial and anti-fungal properties provides deodorizing action and enhance efficacy.
- **SODIUM BICARBONATE:** Known for certain anti-fungal properties, sodium bicarbonate is a safe and effective deodorizer.

<sup>1</sup> Ingredients are sourced paraben and triclosan-free and tested for contaminants.

<sup>2</sup> Data provided by DuPont Tate & Lyle. Available from KDC upon request.



## KDC's PATENT-PENDING NATURAL DEODORANT PLATFORM DOES NOT CONTAIN ANY OF THE FOLLOWING:

- **PARABENS & TRICLOSAN:** Negative media attention has been associated to both preservatives in personal care products. Certain studies have stated that parabens and triclosan may be linked to human health concerns.<sup>1</sup>
- **ALUMINUM:** Many consumers of natural personal care products avoid aluminum and other metals in personal care, including anti-perspirants.
- **SILICONES:** Certain silicones may be bio-accumulative in the environment, specifically in natural waterways. The Canadian government is studying the effects of silicones in the environment and considering a ban of silicones D4 and D5 – common ingredients in anti-perspirants and other personal care.<sup>2</sup>
- **PROPYLENE GLYCOL:** Propylene glycol is a petroleum-derived volatile organic compound (VOC) that can produce skin or respiratory tract irritation in certain individuals.<sup>1</sup>

<sup>1</sup> Third party studies or articles can be provided by KDC upon request.

<sup>2</sup> 2009-05-02 - Canada Gazette Part I, Vol. 143 No. 18



## CORN-DERIVED GLYCOL CONSUMES 40% LESS ENERGY THAN PROPYLENE GLYCOL OR CHEMICALLY-DERIVED GLYCOLS

- **GREENHOUSE EMISSIONS:** Manufacturing corn-derived propanediol emits up to 50% less greenhouse gases than chemically-derived propanediol, and up to 40% less greenhouse gases than propylene glycol.<sup>1</sup>
- **RENEWABLE ENERGY:** Corn-derived propanediol uses up to 35% less non-renewable energy than chemically-derived propanediol or propylene glycol.<sup>1</sup>
- **RENEWABLE SOURCES:** All ingredients are extracted from renewable, plant or nature-based sources.
- **BIODEGRADABILITY:** Corn-derived propanediol is biodegradable.<sup>2</sup> Biodegradability tests not performed on final Zea Platform formula.

<sup>1</sup> Based upon life cycle analysis from design data conducted by DuPont Tate & Lyle. [www.duponttateandlyle.com/life\\_cycle.html](http://www.duponttateandlyle.com/life_cycle.html)

<sup>2</sup> Data provided by DuPont Tate & Lyle. Available from KDC upon request.





## GREEN TECHNOLOGIES

KDC is a leader in the formulation and manufacturing of natural personal care products, supplying the industry's fastest growing brands since 2000. Our portfolio of natural platforms, bases and formulas – and unsurpassed experience in **green chemistry** and the careful positioning of **natural personal care products** – set our clients apart on the market.

Recent breakthroughs in green surfactant (liquid soap) systems, healthier deodorant platforms and new organic bases – and certified manufacturing facility for **organic personal care** – make KDC one of the industry's top innovators in 'green' product development and new manufacturing techniques for beauty's newest, most exciting materials.

CONTACT US

### **KDC Innovation Group**

#### **Duncan Coopland**

Vice President, Sales &  
Business Development

1.416.640.1957

1.416.988.2809

dcoopland@kdc-companies.com

[www.kdc-companies.com](http://www.kdc-companies.com)