

Consumer Alert

Cancer-Causing 1,4-Dioxane Found in Personal Care Products Misleadingly Branded as Natural and Organic



A newly released study commissioned by the Organic Consumers Association (OCA)—a nationwide network of more than 500,000 organic consumers, and overseen by environmental health consumer advocate David Steinman (author of *The Safe Shopper's Bible*), revealed the presence of the undisclosed carcinogenic contaminant 1,4-Dioxane in leading shampoos, body washes, lotions and other personal care and household cleaning products claiming to be “natural” or “organic”. Laboratory tests showed that products certified under the USDA National Organic Program did not contain this toxin. All leading self-proclaimed “organic” brands have at least a few individual “certified organic” ingredients, but for most of these top-selling brands, the product, as a whole, is not USDA organic certified, thereby allowing the presence of synthetic toxins.

WHAT IS 1,4-DIOXANE?

Ethoxylation, a cheap short-cut companies use to provide mildness to harsh ingredients, requires the use of the cancer-causing petrochemical ethylene oxide, which generates 1,4-Dioxane as a by-product. 1,4-Dioxane is considered a chemical “known to the State of California to cause cancer” under proposition 65, and is also suspected as a kidney toxicant, neurotoxicant and respiratory toxicant, among others, according to the California EPA.

You won't see 1,4-dioxane listed on product's ingredient labels, because it is considered a 'contaminant' or 'by-product' of the ethoxylation process, rather than an ingredient. OCA's study indicates the toxin is present in products with synthetic ethoxylated ingredients, including those with myreth, oleth, laureth, cetareth, any other “eth,” PEG, polyethylene, polyethylene glycol, polyoxyethylene, or oxynol, in their names.

CONVENTIONAL NON-ORGANIC PRODUCTS ALSO CONTAIN THE CARCINOGEN

Although previous studies have revealed 1,4-Dioxane is present in many conventional personal care products, for the first time, this new study indicates the toxin is also present in a number of leading self-proclaimed but non-certified “natural” and “organic” branded products.

USDA CERTIFIED ORGANIC PRODUCTS DO NOT CONTAIN THE CARCINOGEN

The study also found that all products certified by the USDA National Organic Program were free of 1,4-dioxane, because the regulations disallow ethoxylation and any other synthetic petrochemical modification.

CONSUMER TIPS

Remember that just because a personal care product labels itself with the words “organic” or “certified organic” doesn't mean it meets any specified organic standards. Look for products that are certified under the USDA National Organic Program (or a similar German program) and products that bear the “USDA Organic” seal. Search product labels for ingredients with the following in their names to avoid products containing 1,4-Dioxane: myreth, oleth, laureth, cetareth, any other eth, PEG, polyethylene, polyethylene glycol, polyoxyethylene, or oxynol. In general, avoid products with unpronounceable ingredients to be sure to avoid synthetic toxins and carcinogens.

SOME OF THE LEADING BRANDS FOUND TO CONTAIN 1,4-DIOXANE

- ▶ JASON Pure Natural & Organic
- ▶ Giovanni Organic Cosmetics
- ▶ Kiss My Face
- ▶ Nature's Gate Organics

These are just a few of the problematic brands. Please see reverse side of sheet for full listing, or go to www.organicconsumers.org/bodycare/ for a full list.

BRANDS FOUND NOT TO CONTAIN 1,4-DIOXANE

All USDA Certified brands tested in this study were 1,4-Dioxane-free, including:

- ▶ Dr. Bronner's
- ▶ Sensibility Soaps (Nourish brand)
- ▶ Terressentials

German Natural “BDIH” Certified brands tested and found to be 1,4-Dioxane-free:

- ▶ Aubrey Organics
- ▶ Dr. Hauschka

MORE INFORMATION

Join the more than 500 companies and thousands of consumers who support OCA's **Coming Clean Campaign**—a campaign to rid the marketplace of synthetic personal care products misleadingly labeled as “organic”.



www.organicconsumers.org/bodycare/

RESULTS OF TESTING FOR 1,4-DIOXANE BY GAS CHROMATOGRAPHY/MASS SPECTROMETRY

Testing performed in 2007 and 2008. **METHOD:** An aliquot of sample was accurately weighed into a vial with 5 mL water and one gram of sodium sulfate. Internal standard (5 µg 1,4-Dioxane-d8) was added. The vial was capped and heated at 95°C for 60 minutes. A one mL aliquot of the head-space over the sample was analyzed by direct injection. The results are given below. **CONDITIONS:** Instrument: Agilent 5973N · Column: 25 m x 0.20 mm HP-624, 1.12 micron film · Column Temp: 40°C (hold 3 min) to 100°C at 10°C/min, then to 180°C at 25°C/min (hold 5 min) · Injector Temp: 220°C · Mass Range: Selected ion monitoring: masses 43, 58, 88 (dioxane): 64 and 96 (dioxane-d8); 1.72 cycles per second.

PRODUCT TESTED	PARTS PER MILLION (µg/g)
365* Everyday Value Body Lotion	ND
365* Everyday Value Dish Liquid	1.6
365* Everyday Value Shampoo	2.2
365* Everyday Value Shower Gel	20.1
Alba Moisturizing Foam Shave Mango Vanilla	ND
Alba Passion Fruit Body Wash	18.2
Alba Replenishing Shampoo	0.7
Alba Very Emollient Bath & Shower Gel (Island Citrus)	ND
Aubrey Organics Natural Baby & Kids Bath Soap	ND
Aubrey Organics Natural Baby & Kids Shampoo	ND
Aubrey Organics Swimmer's Normalizing Shampoo	ND
Aura Cacia Natural Aromatherapy Bubble Bath	14.9
Avalon Organics Glycerin Hand Soap	ND
Avalon Organics Nourishing Shampoo	ND
Burt's Bees Body Wash	ND
Burt's Bees Citrus & Ginger Root Hand Soap	ND
Burt's Bees Very Volumizing Shampoo	ND
Circle of Friends Buenas Noches Bubble Bath	ND
Circle of Friends No Tearski Shampoo	2.1
Citrus Magic 100% Natural Dish Liquid	97.1
Clorox Green Works Natural All-Purpose Cleaner	ND
Clorox Green Works Natural Dilutable Cleaner	ND
Desert Essence Body Wash	ND
Desert Essence Organics Hair Care Lemon Tea Tree Shampoo	ND
Dr. Bronner's and Sundog's Magic Orange Lavender Organic Lotion	ND
Dr. Bronner's and Sundog's Magic Organic Lotion	ND
Dr. Bronner's Magic All-One Organic Fair Shikakai Conditioning Hair Rinse	ND
Dr. Bronner's Magic All-One Organic Fair Trade Shikakai Soap	ND
Dr. Bronner's Magic Soaps 18-in-1 Hemp Almond Pure Castile Soap	ND
Dr. Hauschka Apricot and Sea Buckthorn Shampoo	ND
Dr. Hauschka Body Wash Fresh	ND
Earth Friendly Products Ultra Dishmate	19.0
Earth Friendly Products Ultra Dishmate (Natural Almond)	13.6
Earth Therapeutics Loofah Exfoliating Scrub Oatmeal & Honey	0.9

PRODUCT TESTED	PARTS PER MILLION (µg/g)
Ecco Bella Moisturizing Shampoo Vanilla	0.2
Ecover Dishwashing Liquid	2.4
Emerald Forest with Sapayul Botanical Shampoo	1.7
EO All Purpose Soap	ND
EO Nourishing Shower Gel	ND
EO Volumizing Shampoo	ND
Giovanni Cleanse Body Wash	10.6
Giovanni Golden Wheat Shampoo	4.1
Giovanni Smooth as Silk Deep Moisture Shampoo	2.1
Grandpa's Pine Tar Shampoo	7.8
Head Organics Clearly Head Shampoo	ND
Healthy Times Baby's Herbal Garden Honeysuckle Baby Bath	5.3
Healthy Times Baby's Herbal Garden Pansy Flower Shampoo	8.2
Herbal Clear PG Free Aloe Fresh Deodorant	ND
Hugo Vanilla & Sweet Orange Conditioner	0.6
Jason Apricot Deodorant Stick	ND
Jason Apricot Satin Soap	9.2
Jason Fragrance Free Satin Soap	11.9
Jason Tea Tree Scalp Normalizing Shampoo	7.9
Kiss My Face Early to Bed Shower Gel & Foaming Bath	6.2
Kiss My Face Everyday spf 15 Moisturizer	ND
Kiss My Face Moisture Soap	6.3
Kiss My Face Obsessively Organic Lavender & Chamomile Self Foaming Liquid Soap	0.3
Kiss My Face Obsessively Organic Whenever Shampoo	ND
Lamas Soy Hydrating Shampoo for Chemically Treated, Dry or Damaged Hair	ND
Life Tree Citrus Fresh Dish Soap	0.7
Lily of the Desert Aloe Vera 80 Facial Wash	ND
Method Creamy Hand Wash	7.0
Method Dish Naturally Derived Ultra Concentrate	27.5
Method Hand Wash	ND
Nature's Gate Awapuhi Volumizing Shampoo	3.5
Nature's Gate Baby Soothing Shampoo	1.6
Nature's Gate Lavender & Aloe Deodorant	ND

PRODUCT TESTED	PARTS PER MILLION (µg/g)
Nature's Gate Moisturizing Liquid Soap	2.4
Nature's Gate Organics Fruit Blend Liquid Soap	0.3
Nature's Gate Organics Fruit Blend Shampoo	ND
Nourish Food for Your Healthy Skin Organic Chai Vanilla Body Wash from Sensibility Soaps	ND
Nourish Food for Your Healthy Skin Organic Fragrance-Free Hand Wash from Sensibility Soaps	ND
Nourish Organic Vanilla Yogurt Body Butter	ND
NutriBiotic Super Shower Gel Shampoo with GSE (fresh fruit)	32.2
Origins for Men Skin Diver Active Charcoal Body Wash	3.1
Origins Ginger Burst Savory Body Wash	2.0
Origins Ginger Up Aromatic Conditioner	ND
Origins Hydrating Body Lotion	ND
Origins Sunshine State SPF 20 Sunscreen	ND
Planet Ultra Dishwashing Liquid	20.3
Pure Basic Natural Bath & Body Wash Wild Banana Vanilla	ND
Rainbow Gentle Antibacterial Soap	1.3
Rainbow Soap for Kids	1.1
Sea-Chi Organics Tasmanian Lavender Shampoo	7.5
Seventh Generation Lemongrass & Clementine Zest Natural Dish Liquid	1.5
Seventh Generation Natural Dish Liquid	1.9
ShenMin Vitalize Shampoo for Thin, Fine Hair	2.7
Shikai Moisturizing Shower Gel	2.5
Shikai Natural Everyday Shampoo	ND
Shikai Natural Shampoo	ND
TerrEssential Organic Baby Wash	ND
TerrEssential Organic Body Wash Organic Cool Mint	ND
TerrEssential Organic Flower Therapy Silken Velvet Body Lotion	ND
TerrEssential Organic Fragrance-Free Facial Cleanser	ND
TerrEssential Organic Real Soap for Hands Jammin' Spice with Organic Tea Tree Oil	ND
TerrEssential Organic Sultry Spice Pure Earth Hair Wash	ND
Ultra-Hair Conditioning Shampoo	1.2
Zia Fresh Cleansing Gel with Sea Algae	ND
Zia Skin Basics Daily Moisture Screen SPF 15 with Cucumber	ND

Notes : ND = Not detectable · Detection limit is 0.2 · *365 is the Whole Foods Market private label