



Contaminants of Emerging Concern (CECs) **Essential Oil Guide and Recipes for Contaminant-Free Beauty Products**



What are Contaminants of Emerging Concern (CECs)?

As a result of everyday household use, trace amounts of chemicals from consumer products are accumulating in downstream water sources. CECs are known or suspected toxins or endocrine disruptors, meaning they interfere with the normal functioning of hormones, and may be linked to mutations and other biological abnormalities in aquatic life and human health risks. Traditional wastewater treatment does not effectively remove all CECs, allowing their release into the environment even after water has been treated. Scientists have not yet characterized what level of exposure to these suspected toxins and endocrine disruptors is harmful to humans.



How to Use This Guide

This guide and recipe resource is intended to help consumers avoid exposure to harmful contaminants through making informed shopping choices and making your own contaminant-free beauty products. It includes a glossary of CECs, and provides information covering the essential oils that are great for skin and hair care. The guide provides information about how to use natural oils, along with some easy recipes to make a variety of non-toxic skin and hair care products with simple ingredients. Consult this guide and recipe list to protect yourself and your family from contaminant exposure and to reduce your “chemical footprint.”

Essential Oils

Essential Oils are made from volatile compounds found in plants. They give fruits, flowers, herbs and spices their fragrance and flavor. Obtained by distillation or expression (squeezing or pressing), essential oils are effective in very low concentrations. Tea tree oil, chamomile, lavender, geranium, rose, neroli and ylang ylang essential oils are recommended for all skin types because they are soothing, anti-inflammatory, healing and nutritive.

Carrier Oils

Carrier Oils are used in higher concentrations in cosmetics, or they can be applied directly to the body. They are also used as a base for essential oils. Carrier oils penetrate the skin better than creams because they penetrate cell walls instead of just sealing the skin as cream does. If you have allergies to any oils, especially nut-based oils, check with your doctor before using either carrier or essential oils.

Popular Carrier Oils

Almond Oil: A high protein, low cost oil

Avocado Oil: A great moisturizer

Apricot Kernel Oil: Makes great lip balm

Cocoa Butter: Water repellent, great for very dry skin

Grapeseed Oil: Less greasy than other oils

Sesame Oil: Has some natural sunscreen properties, light and nutty oil

Jojoba Oil (“ho-HO-ba”): A liquid wax; makes a great hair conditioner.

Olive Oil: Slow-drying and a great pre-wash hair conditioner.

Shea Butter: A great skin protectant and moisturizer

Wheat Germ Oil: High in vitamin E

Vitamin E Oil: Use on scrapes and cuts to reduce scar tissue formation and scars. Can also be used as a light sunscreen.

Personal Care Uses

Skin Care with Natural Oils

- Use as a skin moisturizer. The best time to put on oil is after a shower having lightly dried off. Oil seals in the moisture.
- Rub on cuticles. Let sit for 5 minutes, then push back and/or cut with cuticle scissors.
- Combine equal amounts of unscented natural lotion with an essential oil/carrier oil blend for a creamier lotion.
- Use as a lip treatment. Add natural almond, mint, or vanilla extract for scent and flavor.
- Eye make-up remover:
 1. Put equal parts oil and water in small container with a lid or cap (such as a small travel bottle).
 2. Shake before every use. Put a small amount on a cotton ball and use to remove eye makeup.
- Add 1/8 cup to a bath to reduce drying effects of hot water and moisturize skin.
- Rub oil, especially cocoa butter and vitamin E oils, on scars and stretch marks to help fade.
- Add a few drops of vitamin E oil to a quarter-sized amount of sunscreen. Vitamin E oil helps to protect skin from ultraviolet rays.

Hair Care with Natural Oils

- Use a couple drops to smooth frizzy and unruly hairs.
- Rub on to scalp and hair until hair is very lightly coated (usually 1 teaspoon to 1 tablespoon depending on length and thickness) and let sit for as long as you want depending on the level of moisturizing needed. Wash with shampoo and condition normally. If you want intense moisturizing, leave on overnight, but wear a knit hat to keep oil off your pillow. Wash out in the morning.
- Put a few drops on ends and dry areas of hair before blow-drying for a moisturizer.
- Depending on your hair's length and thickness, put a small amount in hair before going swimming to seal cuticle and protect from chemicals.
- Fill cosmetic spray bottle with water; add 3 drops of your favorite essential oil and 1 tbsp oil. When out in the sun, spray on hair to protect if from the sun.

Recipes

Eye Makeup Remover

Ingredients:

Carrier Oil, Water, Essential Oil

Steps:

Step 1: Combine equal parts carrier oil and water into small jar.

Step 2: Add a couple of drops of essential oil for scent.

Step 3: Shake before every use. Put an appropriate amount on a cotton ball and use to remove eye makeup.

Avocado & Mayonnaise Deep Hair Conditioner

Ingredients:

½ Avocado, Mayonnaise

Steps:

Step 1: Mash half an avocado.

Step 2: Add mayonnaise until consistence is smooth and manageable. This will depend on the size of the avocado, and personal preference.

Step 3: Use on hair following regular shampooing.

Apple Cider Vinegar Conditioner

Ingredients:

Apple cider vinegar, Warm Water, Essential Oil (optional)

Steps:

Step 1: Combine equal parts apple cider vinegar and warm water. Add a couple of drops of your favorite essential oil for scent.

Step 2: Use on hair after regular shampooing and rinse.

Body Lotion

Ingredients:

1 tablespoon grated beeswax, ¼ cup cocoa butter, ¼ cup jojoba oil or grapeseed oil, 1/8 teaspoon baking soda, ¼ cup distilled water, 1/8 teaspoon lecithin, 5 drops of essential oil (optional)

Steps:

Step 1: Combine grated beeswax and cocoa butter in microwavable container. Microwave until mixture is a smooth, liquid consistency.

Step 2: Add oil to mixture.

Step 3: Heat water until it is almost to a boil. The water must be hot so that it will not cause the cocoa butter to solidify when added. Add baking soda to the water, then combine with the cocoa butter and beeswax mixture.

Step 4: Add lecithin.

Step 5: Mix continuously for the first couple of minutes. When mixture begins cooling, screw on the lid and shake occasionally for the first hour. The lotion is ready when it has completely cooled. This will take several hours.

Donate Now

If you value this guide and the important work of the Institute for Environmental Solutions, please lend your support.

The Institute for Environmental Solutions is an independent non-profit organization that engages stakeholders to deliver technically sound solutions to complex environmental and health problems – without unwanted side effects. We need your help to continue this important work. Your charitable contributions to IES benefit your health and your environment.

To support IES, please send donations to: IES, 761 Newport Street, Denver, CO 80220. Credit card donations are welcome at <http://www.givingfirst.org/>. Type in "IES" to donate now to IES. 100% of your credit card donation at GivingFirst.org goes directly to IES!