

# HOW TO BECOME AN INGREDIENT DETECTIVE!

**H**ave you ever bought a product that you were assured was natural, only to find that you couldn't pronounce half of the ingredients on the label? Would you like to learn more about "semi-natural" and "derived from" ingredients than the brochure tells you?

There is a source of information that comes from the ingredient manufacturer that is called a Material Safety Data Sheet (MSDS). MSDSs are a summary of important information on chemical substances regarding product information, hazard identification, first-aid measures, exposure limits and precautions when using the ingredient.

The Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (HCS) requires an MSDS be prepared for chemicals that are hazardous according to the criteria described in the HCS.

A good website to start researching the chemicals used in skin care and other products is: [www.hazard.com/msds](http://www.hazard.com/msds)

This takes you to the SIRI (Safety Information Resources Inc.) MSDS website. You are given three search options

1. Search by the manufacturer, which in most cases you probably won't know
2. Search their database by entering the ingredient name
3. Additionally, you can search another database for chemical toxicity data not found in the MSDS section.

For example, if we use the database search (2nd option) to look for information on phenoxyethanol, which is used as a preservative in many so-called "natural" skin care products we see five different MSDSs on file.

A sample of information found on this ingredient included: Hazards Identification

## EMERGENCY OVERVIEW

WARNING! Harmful if swallowed. Causes skin irritation. May cause central nervous system depression. May cause kidney damage. May cause respiratory and digestive tract irritation.

Target Organs: Kidneys, central nervous system.

## POTENTIAL HEALTH EFFECTS

Skin Contact: Severe irritation or burns.

Eye Contact: Severe irritation or burns.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhoea. May cause central nervous system depression, characterised by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. May cause kidney failure. May be harmful if swallowed. Lesions may appear in the brain, lungs, liver, meninges and heart. A little scary don't you think?

## ANIMAL TESTING DATA

Lethal Dose 50 (LD50) indicates the quantity of the chemical necessary to kill 50% of the animal test subjects and is measured in units per kilogram of the animal's body weight.

Oral, mouse: LD50 = 933 mg/kg;

Oral, rat: LD50 = 1260 mg/kg;

Skin, rabbit: LD50 = 5 mL/kg;

Skin, rat: LD50 = 14422 mg/kg.

By arming yourself with independent information about the many toxic ingredients found in today's skin and personal care products, you can make an informed decision to protect the health of you and your family.