

# **Green Workplace Consulting**

## **Workplace Chemicals Assessment**

*SAMPLE REPORT*

**NOTE: This report has been designed to provide a general idea of the detailed information that our assessments provide. Some sections have been omitted.**

**Check 1: Corrosiveness**

We first check the pH-Value of each product. This value should range between 2.5 and 12.5. Chemicals outside of this pH range can be extremely corrosive and problematic to human and environmental health and should be replaced where possible.

**Check 2: Toxic to Human Health**

The MSD sheets are then checked against the five most relevant categories of chemical hazards (we assume that eye and skin irritation will occur upon contact).

These categories include:

- Carcinogenicity (cancer causing potential)
- Sensitization (potential to cause severe allergic reaction upon repeated exposure)
- Teratogenicity (potential to cause damage to a developing fetus)
- Mutagenicity (potential to cause genetic mutations – often related to cancer)
- Reproductive Toxicity (potential to impair reproduction)

Products containing ingredients known to cause any of the above five hazardous effects should be replaced immediately.

**Check 3: Chemical Ingredients and LEAS Standards**

The third and final check involves screening a product's chemical ingredients against the categorization criteria of the Labour Environmental Alliance Society (LEAS). LEAS categories include chemical ingredients that make the Alliance's 'Do Not Use' list (TOXIC 1) and those that make the 'Substitute Where Possible' list (TOXIC 2).

The Labour Environmental Alliance Society (LEAS) is BC-based Charitable organization that works to create alliances and initiatives that promote healthy workplaces, healthy homes and communities and a healthy environment.

LEAS research has been supported by WorkSafe BC and makes use of research findings provided by the World Health Organization's International Agency for Research on Cancer (IARC) and Environment Canada's Environmental Protection Act (CEPA).

For more information on:

LEAS visit: [www.leas.ca](http://www.leas.ca)

IARC visit: [www.iarc.fr/](http://www.iarc.fr/)

CEPA visit: [www.ec.gc.ca/CEPARRegistry/the\\_act/](http://www.ec.gc.ca/CEPARRegistry/the_act/)

## Cleaning Products in Use

### 3.1. Overview of Current Cleaning Products

Client cleaning products reviewed by Green Workplace include:

- Super Star Vehicle Cleaner by Acme Super Scrub Solutions Ltd.
- Magic Man All Purpose Powder by Sprinkle & Shine Detergents Inc.
- Dirt Magic All Surface Shampoo by Acme Super Scrub Solutions Ltd.
- Wonder Muscle Cleaner/Degreaser by Sprinkle & Shine Detergents Inc.
- Tough as Bricks Cleaner/Degreaser by Abra Kadabra Solutions Ltd.
- Presto Plus/Degreaser/Sterilizer/Tarnish Remover by Sprinkle & Shine Detergents Inc.
- Monster Clean/Degreaser by Sprinkle & Shine Detergents Inc.

### 3.2. Hazardous Cleaning Products

Among the 7 cleaning products reviewed, Green Workplace identified 4 products that should be replaced due to their toxic and/or hazardous attributes.

These products are:

- Super Star Vehicle Cleaner by Acme Super Scrub Solutions Ltd.
- Magic Man All Purpose Powder by Sprinkle & Shine Detergents Inc.
- Tough as Bricks Cleaner/Degreaser by Abra Kadabra Solutions Ltd.
- Monster Clean/Degreaser by Sprinkle & Shine Detergents Inc.

### 3.3. Toxicity Reporting and Product Details of Toxic Products

The following products should be discontinued and replaced where possible:

**Super Star Vehicle Cleaner by Acme Super Scrub Solutions Ltd.**

Super Star Vehicle Cleaner contains Ethoxylated Nonyl Phenols or NPEs (CAS 9016-45-9), which are listed by the LEAS as TOXIC 1. NPE's are known endocrine or hormone disrupters and have been listed as CEPA-toxic. Possessing a caustic PH factor, Super Star Vehicle Cleaner is corrosive to eyes and skin and must be handled through protective wear such as gloves. Extra care should be taken to avoid skin and eye contact.

**Magic Man All Purpose Powder by Sprinkle & Shine Detergents Inc.**

This product contains Ethylene Glycol Monobutyl Ether (CAS 111-76-2), also known as 2-Butoxyethanol or 3-Oxa-1-Heptanol. The LEAS lists this chemical as TOXIC 1, and it may cause liver, kidney and reproductive damage, including damage to the male testes and the developing fetus. This chemical has been listed as CEPA-toxic under the Canadian Environmental Protection Act.

### 3.4. Toxicity Reporting and Product Details of Non-Toxic Products

It should be remembered that any chemical is potentially toxic if used improperly. Always follow manufacturers directions and refer to Material Safety Data sheets for all chemicals in use.

Green Workplace did not discover any toxic ingredients in the following products:

- Dirt Magic All Surface Shampoo by Acme Super Scrub Solutions Ltd.
- Wonder Muscle Cleaner/Degreaser by Sprinkle & Shine Detergents Inc.
- Presto Plus/Degreaser/Sterilizer/Tarnish Remover by Sprinkle & Shine Detergents Inc.

Caution: not all ingredients are reviewed by scientific experts for toxicity before being released into the marketplace and Green Workplace did not do an exhaustive search of the scientific literature. For safety's sake, assume all chemicals are toxic to some degree and handle them with care.

## 4. Green Cleaning Alternatives

Green Workplace researched replacement products for Client's Toxic products.

These products are only suggestions. Your company should work with its chemical supplier/ cleaner to source less or non-toxic alternatives and/or investigate other chemical supply companies. Although our recommended alternative products are greener than your current hazardous cleaners, they are still chemicals and need to be handled according to safety rules and regulations.

The following replacement products have been defined as non-toxic because they have cleared Green Workplace's three check screening system and have been found to contain no known toxic ingredients. However, these replacement products remain chemical products and may yet be hazardous to health if handled improperly.

### 4.1 Replacement Products Information for Client's Toxic Products

**NOTE: SECTION 4.1 OF THIS REPORT HAS BEEN OMITTED.**