

# Take Off!

Safety Acid Cleaner

## DESCRIPTION

**Take Off!** is a concentrated blend of mild acid and high foaming detergents for cleaning, restoring and rejuvenating all acid-resistant surfaces. **Take Off!** removes scale and mineral deposits, soap scum, body oils and sebum from shower and bathroom fixtures, ceramic tiles and grouting. **Take Off!** is designed to produce a deep, rich foam blanket that clings to both vertical and horizontal surfaces, providing a longer contact time for better cleaning and deodorizing.

## Features and Benefits:

- Excellent wetting ability, can be foam applied
- Effectively removes mineral deposits and proteins
- Eliminates water spotting and detergent residues
- Brightens stainless steel while cleaning
- Use in foamers or pressure spraying units

## SPECIAL INFORMATION

**Take Off!** is a Canadian Food Inspection Agency (CFIA) approved product for use in registered food processing plants. Surfaces in direct food contact must be rinsed with potable water.

Avoid contacting **Take Off!** with eyes and skin. Store upright at temperatures above freezing and do not mix with Bleach or any other cleaners. Always add **Take Off!** to water, never water to acid.

## DIRECTIONS

### **For foam gun applications:**

Use full strength in spray reservoir with medium to hot water. Set proportioning sprayer at 1 part **Take Off!** to 10 parts water. Spray surface and let stand for 5 minutes, rinse well with water. Heavier solids may require brushing.

### **For manual applications:**

Add 1 part **Take Off!** to 5-10 parts water, depending on soiled conditions. Agitate surfaces with mop, brush or cloth and rinse thoroughly with clean water.

## PHYSICAL DATA

Appearance	Clear liquid
Color	Orangey-red
Foam	High
Odor	Sassafrass
pH	1.0 – 2.0

# MATERIAL SAFETY DATA SHEET

## SECTION 1 – PRODUCT/MANUFACTURER'S IDENTITY

Product Name: **TAKE OFF!**

WHMIS CODE: E  
 Proper Shipping Name: PHOSPHORIC ACID, LIQUID  
 Hazard Class: Class 8, P.G. III  
 UN Number: UN 1805 (Ltd.Qty.)

HMIS	
3	Health
0	Flammability
0	Reactivity
C	Personal

Product Use: *Foaming acid cleaner.*

Maxim Technologies Inc.  
 1607 Derwent Way  
 Delta, BC V3M 6K8, Canada  
 Phone: (604) 526-5655

**EMERGENCY PHONE**  
 Canada: Canutec 613-996-6666  
 U.S.A.: Chemtrec 800-424-9300

A=Goggles, B=Goggles & Gloves  
 C=Goggles, Gloves and Apron

ABBREVIATION KEY: N/A=Not Applicable, N/E=Not Established, N/D=Not Determined, >=Greater Than

## SECTION 2 – HAZARDOUS INGREDIENTS INFORMATION

INGREDIENT	CAS NO.	RANGE %	PEL	TLV
<b>PHOSPHORIC ACID</b>	7664-38-2	25.0-45.0	1 ppm	1ppm
LD50 (oral rat)	1530 mg/kg			
LD50 (dermal)	2740 mg/kg			
LC50	No Data			
<b>ALCOHOL ETHOXYLATE</b>	68439-46-3	1.0-5.0	N/A	N/A
LD50 (oral rat)	1376 mg/kg			
LD50 (dermal rabbit)	>2 g/kg			
<b>LAURYL DIMETHYLAMINE OXIDE</b>	1643-20-5	5.0-10.0	N/D	N/D
The above item is reported per 40 CFR 372, Section 313 of Emergency Planning & Community Right-to-know Act of 1986.				
LD50 (oral rat)	400 mg/kg			
LD50 (dermal)	N/D			
LC50	N/D			

## SECTION 3 – PHYSICAL DATA

**Color and Odor:** Clear, orangy-red/Sassafrass odor  
**Boiling Point:** N/D  
**Vapor Pressure (mm HG):** N/D  
**pH:** 1.9 @ 4.9% solution.  
**Physical State:** Liquid.  
**Melting Point:** N/A  
**Vapor Density:** N/D  
**Specific Gravity:** 1.19 @ 20°C  
**Coef. Water/Oil Dist:** Greater than 1.0  
**Evaporation Rate:** N/D  
**Solubility in Water:** Soluble  
**Odor Threshold:** No Data

## SECTION 4 – FIRE AND EXPLOSION HAZARD DATA

**Flash Point and Method:** None to 100°C (TCC)  
**Flammable Limits:** None known.  
**Conditions of Flammability:** None.  
**Unusual Fire and Explosion Hazards:** Prolonged contact with reactive metals (i.e. aluminum, tin, zinc, etc.) May form flammable and explosive hydrogen gas in confined areas.  
**Hazardous Combustion Products:** May liberates oxides of phosphorus under fire situation.  
**Special Fire Fighting:** Wear full protective equipment, including a NIOSH/MSHA approved, self-contained breathing apparatus for fire fighting situations. Use water spray to cool all nearby fire exposed surfaces.

**Sensitivity to Mechanical Impact:** None.  
**Sensitivity to Static Discharge:** None.

**Extinguishing Media:** Not flammable.  
**Auto ignition Temperature:** None known.

## SECTION 5 – REACTIVITY DATA

**Chemical Stability:** Stable under normal storage conditions.  
**Incompatibility (material to avoid):** Avoid contact with strong alkali or soft metals like aluminum, zinc etc.  
**Hazardous Decomposition Products:** May liberates oxides of phosphorus under fire situation.

**Hazardous Polymerization:** Will not Occur.

## SECTION 6 – TOXICOLOGICAL DATA

**Exposure Limits:** See Section 2 under Hazardous Ingredient.  
**Irritancy of Product:** Corrosive to skin, eyes and respiratory system.  
**Sensitization:** None known.  
**Name of Toxicological Synergistic Product:** None known.  
**Teratogenicity:** None known.  
**Effects of Chronic Exposure:** Prolonged or repeated exposure may cause skin irritation or dermatitis, respiratory disorder, or lung damage.  
**Effects of Acute Exposure to Product:** Product exposure may burn eyes and irritate or burn skin. Inhaling vapors or mists may cause respiratory discomfort such as breathing problems, burning, coughing, etc. Ingestion may cause gastrointestinal and abdominal discomfort.

**Routes of Entry:** Skin, eyes, inhalation.  
**Carcinogenicity:** None known.  
**Mutagenicity:** None known.  
**Reproductive Toxicity:** None known.

## SECTION 7 – PREVENTATIVE AND CONTROL MEASURES

**Respiratory Protection:** Use a NIOSH/MSHA approved acid gas respirator for vapors and a dust/mist respirator for misting or spraying operations.  
**Ventilation:** Good general ventilation or local exhaust ventilation for spraying and misting in confined areas.  
**Protective Gloves:** Natural or butyl rubber, nitrile or neoprene gloves.  
**Eye Protection:** Chemical goggles, safety goggles or glasses.  
**Protective Clothing and Equipment:** Long sleeve coveralls. Eye wash recommended in the immediate work area.  
**Storage and Handling Procedures:** Use good industrial hygiene. Do not get in eyes. Avoid contact with skin and clothing. Avoid breathing sprays or mists. Store in a cool, dry place away from incompatibles. Keep container closed when not in use. Do not mix with any other chemicals. Store at temperatures below 30°C (86°F) and keep from freezing.  
**Disposal Procedures for Spills or Leaks:** Wear protective equipment. Dike and contain large spills. For small spills, soak up with a suitable absorbent such as clay, soil or commercially available absorbents, and then dispose of into an approved waste container. Keep away from sewers and out of natural waters.  
**Waste Disposal Method:** Reuse if possible, or otherwise dispose recovered material in accordance with all local, Provincial or Federal Regulations.  
**Special Shipping Information:** Store at temperatures below 30°C (86°F) and keep from freezing.

## SECTION 8 – EMERGENCY FIRST AID PROCEDURES

**First Aid:** If swallowed, give plenty of clean water to drink to dilute product. Do not induce vomiting. Call a Physician. In case of contact with eyes, flush with clean water for 15 minutes. Get medical attention. For contact with skin, wash with clean water and rinse well. If irritation occurs or persists, get medical attention.

## PREPARATION DATA

PREPARED BY: Technical Service / Regulatory Division

PHONE: 604-526-5655

LAST UPDATE: Dec. 24, 2014

THE INFORMATION PROVIDED IN THIS MATERIAL SAFETY DATA SHEET HAS BEEN OBTAINED FROM CURRENT SOURCES AND IS BELIEVED TO BE RELIABLE