



Material Safety Data Sheet

1. Chemical Product & Company Data

Product Name: Microban X-580 Institutional Spray Plus (California Version)	
Manufacturer: ProRestore Products 4660 Elizabeth Street Coraopolis, PA 15108 Telephone: 1-412-264-8340	Supplier:

2. Ingredients

Name	CAS #	UN #	% by volume
2-propanol	67-63-0		10-30
Octylphenoxypolyethoxyethanol (nonionic surfactant)	9036-19-5		1-5
Active Ingredients:			
o-Phenylphenol	90-43-7		.22
Diisobutylphenoxyethoxy ethyl dimethyl benzyl ammonium chloride monohydrate	121-54-0		.70
N-octyl bicycloheptene dicarboximide	113-48-4		.33
Piperonyl butoxide technical	51-03-6		.20
Pyrethrins	51-92		.10

3. Hazards Identification

Emergency Overview
Flammable liquid. Skin and eye irritant.

NOTE: Hazard information is based on the characteristics of the components of this mixture.

Ingestion - May cause abdominal discomfort, nausea, vomiting and diarrhea. Drowsiness or unconsciousness may occur.

Inhalation - Low concentration of the vapor may cause irritation of the respiratory tract with possible chest pain and coughing. High concentrations may cause headache and drowsiness.

Eye Contact - Causes eye irritation and possible corneal injury.

Skin Contact - Prolonged contact may cause discomfort, redness, drying and defatting of the skin.

4. First Aid

Ingestion - If swallowed, promptly drink large quantities of water. Do not induce vomiting. Do not administer water to an unconscious person

Inhalation - Remove to fresh air. Administer artificial respiration if not breathing.

Eye Contact - Flush eyes with water for at least 15 minutes. If irritation persists, seek medical attention.

Skin Contact - Remove contaminated clothing. Wash skin with soap and water.

Microban X-580 Institutional Spray Plus (California Version)

5. Fire Fighting Measures

Flammability Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If yes, under which conditions? Flammable liquid. Potential fire hazard when exposed to excessive heat, flame or other sources of ignition.	
Flashpoint: 77 °F (25 °C)	Upper flammable limit % by volume n. av.	Lower flammable limit % by volume n. av.
Autoignition temperature n. av.	Hazardous combustion products Carbon monoxide and/or carbon dioxide	Explosion data n. ap.
Means of extinction: Apply alcohol type or all purpose foam for large fires. Use dry chemical media or carbon dioxide extinguishers for small fires. SCBA and bunker gear for fire department personnel		

6. Accidental Release Measures

<p>Eliminate all sources of ignition.</p> <p>Wear personal protective equipment.</p> <p>Do not allow spill to reach watercourse or sewers.</p> <p>Contain spill with absorbent mats or booms or inert materials such as sand. Material should be readily available in the workplace.</p> <p>Collect and store waste materials in suitable containers for disposal i.e. metal drums.</p>

7. Handling & Storage

<p>Store in a cool dry place.</p> <p>Keep containers closed and away from heat or flame.</p> <p>Do not use or store near open flame.</p>
--

8. Exposure Controls & Personal Protection

Personal Protective Equipment				
Gloves Natural Rubber	Respirator In processes where mists or vapors may be generated, a NIOSH/MSHA jointly approved respirator is advised in the absence of proper environmental controls.		Eye Goggles or full face respirator	
Footwear n. ap.	Clothing Coveralls or equivalent		Other n. ap.	
Exposure Guidelines				
none established for product				
	OSHA		ACGIH	
	TWA	STEL	TWA	STEL
2-propanol	400 ppm	500 ppm	400 ppm	500 ppm

Microban X-580 Institutional Spray Plus (California Version)

9. Physical and Chemical Properties

Physical state Liquid	Odor and appearance Light yellow liquid, faint mint odor	
Odor threshold (ppm) n. av.	Vapor pressure (mm Hg) n. av.	Vapor density (Air=1) n. av.
Evaporation (butyl acetate = 1) n.av.	Boiling point 215.6 °F (102 °C)	Freezing point n. av.
pH 6.5 - 7.5	Specific gravity 0.9	Coefficient water/oil distribution n. av.
Solubility in water 100%	Viscosity n. av.	% Volatiles (by weight) 25%

10. Stability and Reactivity

Chemical Stability Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If no, under which conditions?
Incompatibility with other substances Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If yes, under which conditions? Avoid strong oxidizing agents.
Reactivity, and under what conditions? Stable under normal conditions.	
Hazardous decomposition products? Carbon monoxide and/or carbon dioxide as combustion by-products.	

11. Toxicological Information

Route of Entry Skin Contact <input checked="" type="checkbox"/> Skin Absorption <input type="checkbox"/> Eye Contact <input checked="" type="checkbox"/> Inhalation <input checked="" type="checkbox"/> Ingestion <input checked="" type="checkbox"/>			
Oral LD50 (rat): >5,000 mg/kg Dermal LD50 (rabbit): >5,000 mg/kg Inhalation LC50 (rat): 2.88 mg/L Eye Irritation (rabbit): Severe Irritant Skin Irritation (rabbit): Slight Irritant Dermal Sensitization (guinea pig): Not a dermal sensitizer			
Carcinogenicity No	Mutagenicity No	Teratogenicity No	Reproductive toxicity No
Synergistic products No	Sensitization No	Neurotoxicity No	Target organs Eyes and Skin

12. Ecological Information

Octylphenoxypolyethoxyethanol (CAS # 9036-19-5) Aquatic effects 96 hr. Fathead Minnow LC50 8.9mg./L

Microban X-580 Institutional Spray Plus (California Version)

13. Disposal Considerations

Disposal for household/residential containers, 1 gallon or smaller container:

If empty: Do not reuse the container. Place in trash or offer for recycling if available.

If partly filled: Call your local solid waste agency or 1-800-CLEANUP for disposal instructions. Never place unused product down any indoor or outdoor drain.

Disposal for nonresidential, nonhousehold containers, 5 gallon pails, 55 gallon drums:

Do not contaminate water, food or feed by storage or disposal.

Pesticide storage: Keep from freezing. Store in ventilated areas.

Pesticide disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container disposal: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose or in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned stay out of smoke.

14. Transport Information

Shipping Name: FLAMMABLE LIQUIDS, N.O.S. (Contains: 2-Propanol)

Hazard Class: 3 (Packing Group III)

UN Identification #: UN1993

US Domestic shipments up to 5 liters (1.3 gallons) per bottle

Consumer Commodity ORM-D for ground shipments, quarts and gallons only.

Consumer Commodity ORM-D-AIR for air shipments, quarts and gallons only.

15. Regulatory Information

This material safety data sheet has been prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the Hazardous Products Act (Can.) and the Controlled Products Regulations (Can.) This product has been classified in accordance with the hazard criteria of the CPR (Can.) and the MSDS contains all the information required by the CPR (Can.).

Federal Level Regulations: This is an EPA FIFRA registered pesticide (EPA Registration No. 70385-3). This material can only be used commercially in the EPA registered application(s) noted on the product label.

This product is classed as a **flammable liquid and as a skin and eye irritant** - 29 CFR 1910.1200 and Controlled Products Regulations (Can.)

WHMIS classification **B2 D2B**

This product is not subject to the reporting requirement of Section 313 of Title III of Superfund Amendments and Reauthorization Act (SARA) 1986 and 40 CFR part 372.

California Proposition 65:

Warning! This product contains chemical(s) known to the state of California to be Carcinogenic.

<u>Weight%</u>	<u>Components</u>	<u>CAS No.</u>
.22%	o-Phenylphenol	90-43-7

Carcinogenic Effects

For Component: o-Phenylphenol

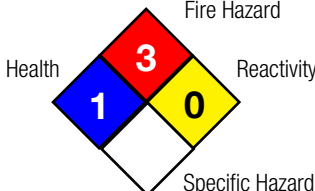
Ortho-phenylphenol and Sodium ortho-phenylphenol were tested in accordance with the EPA Final Guidance for Carcinogenic Risk. OPP and Na-OPP were classified as "Not Likely to be Carcinogenic to Humans" based on no evidence of carcinogenic effects at the defined dose range of 200 mg/kg/day. At doses greater than 200 mg/kg/day, OPP and Na-OPP were classified as "Likely to be Carcinogenic to Humans" based on the presence of urinary bladder tumors in rats and the presence of liver tumors in mice.

Carcinogenicity:

No Carcinogenic substances as defined by IARC, NTP and/or OSHA.

Microban X-580 Institutional Spray Plus (California Version)

16. Other Information

HMIS (U.S.A.)		National Fire Protection Association (U.S.A.)			
Health Hazard	1				
Fire Hazard	3				
Reactivity	0				
Personal Protection	c				
This product is a disinfectant, insecticide and deodorant.					
For chemical emergency during transportation call INFOTRAC (US) 1-800-535-5053 (INT'L) 1-352-323-3500					
Prepared by: ProRestore Products, Coraopolis, PA / Cliff Zlotnik		Phone No: 1-412-264-8340	Date: October 22, 2009		

Abbreviations:

n. av. = not available

mm Hg = millimeters of Mercury

COC = Cleveland Open Cup

LD = Lethal Dose

n. ap. = not applicable

PMCC = Pensky Martens Closed Cup

TWA = Time Weighted Average

LC = Lethal Concentration

ppm = parts per million

TCC = Tagliabue Closed Cup

STEL = Short Term Exposure Limit

This information is furnished without warranty, expressed or implied except that it is accurate to the best knowledge of ProRestore Products. The data and information on this sheet relates only to the specific material designated herein. ProRestore Products assumes no legal responsibility for use or reliance upon this data.

SHAKE WELL BEFORE AND DURING USE.
TEST FABRIC OR SURFACE IN AN INCONSPICUOUS AREA
FOR COLOR FASTNESS OR ADVERSE REACTION.

**PRECAUTIONARY STATEMENTS:
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

WARNING: May be harmful if swallowed (inhaled or absorbed through the skin). Do not breathe vapors (dust or spray mist). Causes eye (and skin) irritation. Do not get in eyes, on skin or on clothing.

FIRST AID

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Microban Formula X-580 Institutional Spray Plus should be applied with hand or power operated sprayers, automated metering systems or gravity drip dispensers as an insecticide, and deodorizing agent, to previously cleaned surfaces. Spray areas until thoroughly moist, giving special attention to cracks and crevices. Allow ten to twenty minutes for drying. It is not necessary to wipe the sprayed surface. Microban Formula X-580 Institutional Spray Plus should not stain those materials not stained by water. Remove pets, birds, and cover fish aquariums before spraying.

Direct and repeat spraying of Ants, Roaches, Bedbugs, Silverfish and other harmful insects and in the cracks, crevices and hidden surfaces where they hide are necessary for control. Apply every 28 days or as often as needed.

To Kill Fleas and Ticks: Remove and destroy old animal bedding. Spray sleeping quarters of animals, floor areas, around baseboards, window and door frames, cracks, crevices and wherever the presence of these insects are suspected. Repeat as necessary. Thoroughly vacuum rugs and carpets prior to application. Do not spray animals. Put fresh bedding in animal quarters after spray has dried. Treat animals with a registered flea and tick control product before allowing them to enter treated area.

To Kill Sowbugs, Centipedes, Firebrats and Mites: Contact as many insects as possible with the spray. Also thoroughly spray all parts of the room suspected of harboring these pests. Special attention should be paid to cracks, crevices, hidden surfaces under sinks, basement and utility rooms, floors, doorjams, behind and under stoves and refrigerators.

To Kill Flies, Mosquitoes, Gnats and Wasps: Close all doors and windows and spray upward into center of room with a slow sweeping motion. Spray 5-10 seconds for average room. Keep room closed for 15 minutes after spraying. Ventilate room thoroughly before re-entry. Sweep up and destroy fallen insects. Before spraying cover exposed food and utensils.

To Kill Carpet Beetles, Lice and Moths: Clean all articles prior to application. Thoroughly spray top and undersides of rugs and carpets. Thoroughly spray the interiors of lockers, trunks, closets, cupboards and other storage areas. Spray directly on restroom fixtures. When treating upholstered furniture and mattresses thoroughly spray exterior, paying particular attention to seams and folds. Interior should be treated to eliminate hidden infestations.

Microban Formula X-580 Institutional Spray Plus when used as directed is effective in decontaminating the treated exposed surfaces of bedding, mattresses, textiles, drapes, upholstered furniture, rugs, carpets and in storage areas to control insects and odors wherever they are a problem.

- Pest Control Service
- Odor Control Service
- Carpet Cleaning Service
- Disinfection Service
- Waste-Removal Service
- Trash Chutes and Garbage Rooms
- Waste Compactors
- Storage areas and Basements
- Condensation collection and Drainage areas
- Refuse trucks
- Shoes and boots
- Movie booths
- Bowling alleys
- Exercise rooms
- Veterinaries
- Laundry receiving stations
- Antique shops
- Upholsterers shops

microban

X-580 INSTITUTIONAL SPRAY PLUS

DISINFECTANT - INSECTICIDE - DEODORANT

FOR INSTITUTIONAL, HOUSEHOLD, FARM PREMISE USES AND ANIMAL QUARTERS

**Microban Formula X-580 Institutional Spray Plus is a Disinfectant
and is also effective in controlling insects and odors.**

ACTIVE INGREDIENTS

o-Phenylphenol	0.22%
Diisobutylphenoxyethoxy ethyl dimethyl benzyl ammonium chloride monohydrate	0.70%
N-octyl bicycloheptene dicarboximide	0.33%
Piperonyl butoxide technical	0.20%
Pyrethrins	0.10%
INERT INGREDIENTS	98.45%
TOTAL	100%

[equivalent to (butylcarbityl) (6-propyl piperonyl) ether: 0.16% and related compounds: 0.04%]

E.P.A. Reg. No. 70385-3
E.P.A. EST. No. 70385-PA-001

KEEP OUT OF REACH OF CHILDREN
WARNING
SEE PRECAUTIONS ON SIDE PANEL

Net Contents: □ 8 OZ. (0.237) Litres □ 1 PT. (0.473) Litres □ 1 QT. (0.946) Litres
■ 1 GAL. (3.785) Litres □ 5 GAL. (18.925) Litres □ 55 GAL. (208.175) Litres
Mfg by: PRORESTORE PRODUCTS, 4660 Elizabeth Street, Coraopolis, PA. 15108
SHAKE WELL BEFORE AND DURING USE
U.S. Patent No. 3,458,629

GENERAL METHOD OF APPLICATION

Surfaces and objects must be cleaned of gross filth with suitable detergent before treatment. Spray surfaces and articles until thoroughly wet, use enough so that treated surfaces and objects remain wet for at least 10 minutes. May be applied with a sponge to pre-cleaned, hard non-porous surfaces, allowing to dry for 10 minutes. Heavily treated spaces should be adequately ventilated and not re-entered for at least one hour after treatment.

AS A DISINFECTANT: In hospitals, operating rooms, emergency rooms, lobbies, hallways, patient rooms, wards, washrooms, scrub stations, mop rooms, morgues, pathology labs, nurse's stations, laboratories, veterinary clinics and other health care facilities; in schools, hotels, motels, restaurants, offices, homes and industrial buildings. For use on pre-cleaned hard non-porous surfaces such as glazed tiled porcelain, waste receptacles, compactors, on, in and around rest room fixtures, toilet seats, locker rooms, telephones, door knobs, hospital apparatus and equipment, furniture and empty containerized storage units.

AS A DEODORIZING AGENT

For use as a deodorizing agent on carpeting found in schools, hotels, homes, shelters, commercial, industrial and public buildings. Apply full strength with sprayer until moist to carpet nap and rake or brush in. Allow to remain dry. For best results, carpets should be cleaned before application.

This product is not to be used as a terminal sterilant/high level disinfectant on any surface or instrument that (1) is introduced directly into the human body, either into or in contact with the bloodstream or normally sterile areas of the body, or (2) contacts intact mucous membranes but which does not ordinarily penetrate the blood barrier or otherwise enter normally sterile areas of the body. This product may be used to pre-clean or decontaminate critical or semi-critical medical devices prior to sterilization or high level disinfection.

TO DISINFECT FARM PREMISES, POULTRY HOUSES, ANIMAL PENS AND VEHICLES

Remove all animals and feed from premises, vehicles and enclosures. Remove all litter and manure from floors, walls and surfaces of barns, pens, stalls, chutes and other facilities and fixtures occupied or traversed by animals. Empty all troughs, racks and other feeding and watering appliances. Thoroughly clean all surfaces with soap or detergent and rinse with water. Saturate all surfaces with the recommended disinfecting solution for a period of 10 minutes. Immerse all halters, ropes and other types of equipment used in handling and restraining animals, as well as forks, shovels and scrapers used for removing litter and manure. Ventilate buildings, cars, boats and other closed spaces. Do not house livestock or employ equipment until treatment has been absorbed, set or dried. Thoroughly scrub all treated feed racks, mangers, troughs, automatic feeders, fountains and waterers, with soap or detergent and rinse with potable water before reuse. Apply Microban Formula X-580 Institutional Spray Plus full strength as directed in general method of application until thoroughly wet. Allow all surfaces to dry thoroughly, ventilate enclosed spaces adequately. Do not house animals in treated areas until thoroughly dry and free from odors.

PHYSICAL AND CHEMICAL HAZARDS

Flammable. Keep away from heat and open flame.

STORAGE AND DISPOSAL (for containers larger than one gallon)

Do not contaminate water, food or feed by storage and disposal.

PESTICIDE STORAGE: Keep from freezing. Store in ventilated areas.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

STORAGE AND DISPOSAL (for household/residential containers)

IF EMPTY: Do not reuse this container. Place in trash or offer for recycling if available.

IF PARTLY FILLED: Call your local solid waste agency or 1-800-CLEANUP for disposal instructions. Never place unused product down any indoor or outdoor drain.