

**1. Identification of the substance/mixture and of the company/undertaking**

**1.1 Product identifier**

**Product name** Microban X590  
**Product code** LG-F1212

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

**Recommended Use** Antimicrobial  
**Restrictions on use** Professional Use Only  
**EPA Registration Number** 70385-3

**1.3 Details of the supplier of the safety data sheet**

**Supplier** ProRestore Products  
1016 Greentree Road, Suite 115  
Pittsburgh, PA 15220  
Phone: (412) 264-8340

**1.4 Emergency telephone number**

**Emergency telephone number** INFOTRAC 1-800-535-5053 (North America)  
1-352-323-3500 (International)

**2. Hazards identification**

**2.1 Classification of the substance or mixture**

**GHS Classification in accordance with 29 CFR 1910.1200**

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3 - (H336)
Flammable liquids	Category 3

**2.2 Label elements**

**Signal Word**  
Warning

**Hazard Statements**  
Causes serious eye irritation  
May cause drowsiness or dizziness  
Flammable liquid and vapor



**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Use only outdoors or in a well-ventilated area  
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
 Keep container tightly closed  
 Ground/Bond container and receiving equipment  
 Use explosion-proof electrical/ventilating/lighting/equipment  
 Use only non-sparking tools  
 Take precautionary measures against static discharge  
 Wear protective gloves/clothing and eye/face protection  
 Keep cool

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 If eye irritation persists: Get medical advice/attention  
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower  
 IF INHALED: Remove person to fresh air and keep comfortable for breathing  
 Call a POISON CENTER or doctor if you feel unwell  
 In case of fire: Use CO2, dry chemical, or foam to extinguish

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
 Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**2.3. Other Hazards Hazards not otherwise classified (HNOC)**

Not Applicable

**2.4 Other information**

Not Applicable

**Unknown Acute Toxicity**

< 1% of the mixture consists of ingredient(s) of unknown toxicity

**3. Composition/Information on Ingredients**

**Substance**

**Mixture**

Chemical Name	CAS-No	Weight %
Isopropyl alcohol	67-63-0	20 - 30
Polyethylene glycol octylpheny ether	9036-19-5	1 - 5

The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. First aid measures**

**4.1 Description of first-aid measures**

**General advice**

Show this safety data sheet to the doctor in attendance. When symptoms persist or in all

cases of doubt seek medical advice.

<b>Eye contact</b>	Remove contact lenses, if present. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician if irritation develops or persists.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water. Remove all contaminated clothes and shoes. Use a mild soap if available. Call a physician if irritation develops or persists. If skin irritation persists, call a physician.
<b>Inhalation</b>	Immediate medical attention is required. Move to fresh air. If not breathing, give artificial respiration.
<b>Ingestion</b>	Gently wipe or rinse the inside of the mouth with water. Never give anything by mouth to an unconscious person. Get medical attention immediately. Give small amounts of water to drink.

**4.2 Most important symptoms and effects, both acute and delayed**

**Symptoms** See Section 2.2, Label Elements and/or Section 11, Toxicological effects.

**4.3 Indication of any immediate medical attention and special treatment needed**

**Notes to physician** Treat symptomatically.

**5. Fire-Fighting Measures**

**5.1 Extinguishing media**

**Suitable extinguishing media**  
Water spray. Carbon dioxide (CO<sub>2</sub>). Dry powder. Alcohol-resistant foam.

- Small Fires** Dry chemical or CO<sub>2</sub>.
- Large Fires** Alcohol type or all purpose foam.

**Unsuitable Extinguishing Media** High volume water jet.

**5.2 Special hazards arising from the substance or mixture**

**Special Hazard**  
Hazardous decomposition products formed under fire conditions Flash back possible over considerable distance

**Hazardous Combustion Products** No information available.

**Explosion Data**  
**Sensitivity to Mechanical Impact** Yes.  
**Sensitivity to Static Discharge** None.

**5.3 Advice for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. Accidental Release Measures**

**6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Remove all sources of ignition. Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes and clothing. Do not breathe vapors or spray mist.

**6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not allow material to contaminate

ground water system. See Section 12 for additional Ecological information.

**6.3 Methods and materials for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

**7. Handling and storage**

**7.1 Precautions for safe handling**

**Advice on safe handling** Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapors or spray mist. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapor in air and avoid vapor concentration higher than the occupational exposure limits. Mixture may charge electrostatically: always use earthing leads when transferring from one container to another. Keep away from sources of ignition - No smoking.

**Hygiene measures** When using, do not eat, drink or smoke. Wash hands before breaks and at the end of workday. Remove and wash contaminated clothing before re-use.

**7.2 Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Use only in area provided with appropriate exhaust ventilation. Keep locked up or in an area accessible only to qualified or authorized persons. Use only explosion-proof equipment. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Electrical equipment should be protected to the appropriate standard. Store between 41 and 77 °F (5 - 25° C) in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. Store in original container.

**Materials to Avoid** Strong oxidizing agents.

**8. Exposure controls/personal protection**

**8.1 Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	British Columbia	Alberta	Quebec	Ontario TWAEV
Isopropyl alcohol 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m <sup>3</sup>	TWA: 200 ppm STEL: 400 ppm	TWA: 200 ppm TWA: 492 mg/m <sup>3</sup> STEL: 400 ppm STEL: 984 mg/m <sup>3</sup>	TWA: 400 ppm TWA: 985 mg/m <sup>3</sup> STEL: 500 ppm STEL: 1230 mg/m <sup>3</sup>	TWA: 200 ppm STEL: 400 ppm

**8.2 Appropriate engineering controls**

**Engineering Measures** Ensure adequate ventilation, especially in confined areas.

**8.3 Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Safety glasses with side-shields.

**Skin and body protection** Long sleeved clothing. Rubber or plastic apron.

**Respiratory protection** In case of insufficient ventilation wear suitable respiratory equipment.

**Hygiene measures** See section 7 for more information

**9. Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid
<b>Appearance</b>	Clear liquid
<b>Color</b>	Yellowish
<b>Odor</b>	Mint-like
<b>Odor Threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
<b>pH</b>	6.5-7.5	
<b>Melting/freezing point</b>		No information available
<b>Boiling point/boiling range</b>	102 °C / 216 °F	
<b>Flash Point</b>	25 °C / 77 °F	
<b>Evaporation rate</b>		No information available
<b>Flammability (solid, gas)</b>		No information available
<b>Flammability Limits in Air</b>		
upper flammability limit		No information available
lower flammability limit		No information available
<b>Vapor pressure</b>		No information available
<b>Vapor density</b>		No information available
<b>Specific Gravity</b>	0.9	
<b>Water solubility</b>	Soluble in water	
<b>Solubility in other solvents</b>		No information available
<b>Partition coefficient</b>		No information available
<b>Autoignition temperature</b>		No information available
<b>Decomposition temperature</b>		No information available
<b>Viscosity, kinematic</b>		No information available
<b>Viscosity, dynamic</b>		No information available
<b>Explosive properties</b>		No information available
<b>Oxidizing Properties</b>		No information available

**9.2 Other information**

**Volatile organic compounds (VOC) content** 2 lb/gal

**10. Stability and Reactivity**

**10.1 Reactivity**

No data available

**10.2 Chemical stability**

Stable under recommended storage conditions Risk of ignition

**10.3 Possibility of hazardous reactions**

None under normal processing.

**10.4 Conditions to Avoid**

Direct sources of heat.

**10.5 Incompatible Materials**

Strong oxidizing agents.

**10.6 Hazardous Decomposition Products**

Carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), dense black smoke.

**11. Toxicological information**

**11.1 Acute toxicity**

**Numerical measures of toxicity: Product Information**

The following values are calculated based on chapter 3.1 of the GHS document

**Unknown Acute Toxicity** < 1% of the mixture consists of ingredient(s) of unknown toxicity

**Oral LD50** 15,204.00 mg/kg  
**Dermal LD50** 55,417.00 mg/kg

**Numerical measures of toxicity: Component Information**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Isopropyl alcohol 67-63-0	5840 mg/kg ( Rat )	= 13,900 mg/kg ( Rabbit )	= 72600 mg/m <sup>3</sup> ( Rat ) 4 h
Polyethylene glycol octylpheny ether 9036-19-5	1700 mg/kg ( Rat )	-	-

**11.2 Information on toxicological effects**

**Skin corrosion/irritation**

Product Information

- No information available

Component Information

- No information available

**Serious eye damage/eye irritation**

Product Information

- No information available

Component Information

- No information available

**Respiratory or skin sensitization**

Product Information

- No information available

Component Information

- No information available

**Germ cell mutagenicity**

Product Information

- No information available

Component Information

- No information available

**Carcinogenicity**

Product Information

- The table below indicates whether each agency has listed any ingredient as a carcinogen

Component Information

- Contains a known or suspected carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
Isopropyl alcohol 67-63-0	-	Group 3	-	

**Reproductive toxicity**

Product Information

- No information available

Component Information  
 • No information available

**STOT - single exposure**  
 No information available

**STOT - repeated exposure**  
 No information available

**Other adverse effects**  
Product Information  
 • No information available  
Component Information  
 • No information available

**Aspiration hazard**  
Product Information  
 • No information available  
Component Information  
 • No information available

**12. Ecological information**

**12.1 Toxicity**

**Ecotoxicity** No information available

5.17613 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

**Ecotoxicity effects**

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Isopropyl alcohol 67-63-0	EC50: 96 h <i>Desmodesmus subspicatus</i> 1000 mg/L EC50: 72 h <i>Desmodesmus subspicatus</i> 1000 mg/L	LC50: 96 h <i>Pimephales promelas</i> 9640 mg/L flow-through LC50: 96 h <i>Pimephales promelas</i> 11130 mg/L static LC50: 96 h <i>Lepomis macrochirus</i> 1400000 µg/L	EC50: 48 h <i>Daphnia magna</i> 13299 mg/L

**12.2 Persistence and degradability**

No information available.

**12.3 Bioaccumulative potential**

Discharge into the environment must be avoided

Chemical Name	log Pow
Isopropyl alcohol 67-63-0	0.05

**12.4 Mobility in soil**

No information available.

**12.5 Other adverse effects**

No information available

**13. Disposal Considerations**

**13.1 Waste treatment methods**

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a

hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

**14. Transport Information**

**DOT** Quarts and gallons ship as limited quantity.  
**UN/ID No** 1993  
**Proper shipping name** Flammable Liquid, N.O.S.  
**Hazard class** 3  
**Packing Group** III

**MEX** -

**IMDG**  
**Proper shipping name** Flammable Liquid, N.O.S. (Isopropanol)  
**Hazard class** 3  
**UN** 1993  
**Packing Group** III

**IATA** -

**15. Regulatory information**

**15.1 International Inventories**

**TSCA** -  
**DSL** -  
**EINECS/ELINCS** Complies  
**ENCS** -  
**IECSC** -  
**KECL** -  
**PICCS** -  
**AICS** Complies  
**NZIoC** -

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL** - Canadian Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances  
**NZIoC** - New Zealand Inventory of Chemicals

**15.2 U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	SARA 313 - Threshold Values %
Isopropyl alcohol 67-63-0	1.0

**15.3 Pesticide Information**

**U.S. EPA Pesticide Information**



**EPA Pesticide Registration Number** 70385-3

**EPA Statement**  
 This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

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

**15.4 U.S. State Regulations**

**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
o-phenyl phenol - 90-43-7	Carcinogen
Ethylene oxide - 75-21-8	Carcinogen Developmental Female Reproductive Male Reproductive

**16. Other information**

<b>NFPA</b>	<b>Health Hazard</b> 2	<b>Flammability</b> 2	<b>Instability</b> 0	<b>Physical and chemical hazards</b> -
<b>HMIS</b>	<b>Health Hazard</b> 2	<b>Flammability</b> 2	<b>Physical Hazard</b> 0	<b>Personal protection</b> X

**Legend:**

- ACGIH (American Conference of Governmental Industrial Hygienists)
- Ceiling (C)
- DOT (Department of Transportation)
- EPA (Environmental Protection Agency)
- IARC (International Agency for Research on Cancer)
- International Air Transport Association (IATA)
- International Maritime Dangerous Goods (IMDG)
- NIOSH (National Institute for Occupational Safety and Health)
- NTP (National Toxicology Program)
- OSHA (Occupational Safety and Health Administration of the US Department of Labor)
- PEL (Permissible Exposure Limit)
- Reportable Quantity (RQ)
- Skin designation (S\*)
- STEL (Short Term Exposure Limit)
- TLV® (Threshold Limit Value)
- TWA (time-weighted average)

**Revision Date** 06-Jul-2016

**Revision Note**  
 No information available

**Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**