



Formula 420

Lemon Heavy Duty Cleaner & Disinfectant

Formula 420 is an EPA registered and USDA approved lemon disinfectant and deodorant cleaner. Effective as a broad spectrum disinfectant on pre-cleaned, inanimate, non-porous, and hard environmental surfaces.

Designed for use in hospitals, schools, institutions, hotels, and food service facilities. The special formulation allows it to be used on any hard surface that can tolerate water including but not limited to the following tables, floors, walls, drinking fountains, tile, porcelain, stoves, animal cages, refrigerators, sinks, restroom fixtures, shower stalls, toilets, urinals, and trash receptacles.

Sanitizes, deodorizes, and cleans all in one operation, which reduces labor hours, cost, and inventory.

DIRECTIONS FOR APPLICATION

Light Cleaning and Deodorizing: Prepare a solution of two ounces Formula 420 per one gallon of water.

Disinfecting and Heavy Duty Cleaning:
Prepare a solution consisting of 4-5 ounces Formula 420 per gallon of water. Apply with cloth or mop to pre-cleaned, inanimate surface. Allow solution to set for ten minutes before removing with damp cloth or mop.

Small Tools and Household Items: Remove all visible soil or dirt present. Soak tweezers, forceps, combs, brushes, or scissors in two ounce Formula 420 per quart of water solution for ten minutes. Rinse and dry before reuse.

PRODUCT SPECIFICATIONS

Color:	Yellow	Abrasives:	None
Odor:	Lemon	Flash Point:	None (waterbased)
pH:	12.5 - 13.0	Hard Water Tolerance:	750 ppm
Base:	Quaternary ammonium chloride	Biodegradability:	Complete
		Storage/Stability:	2 years
Viscosity:	Water thin	Weight per Gallon:	8.46 lbs./gal.
Foam:	Moderate	Freeze / Thaw Stability:	Keep from freezing



Cavalier Inc.

PO Box 11171 Norfolk, Va. 23517
Phone: 757-855-6091 Fax: 757-855-1818

SECTION 1-PRODUCT IDENTIFICATION AND SUPPLIER INFORMATION

Product Name: Formula 420**Generic Name:** Heavy Duty Lemon Cleaner & Disinfectant**Chemical Family:** Quaternary Detergent Blend**Formula:** Proprietary**Supplier Name:** Cavalier, Inc.**Supplier Address:** PO Box 11171 Norfolk, Va. 23517**Supplier Phone:** Phone: 757-855-6091 Fax: 757-855-1818

SECTION 2-INGREDIENT INFORMATION

CHEMICAL NAME	CAS NO.	WT. %	PEL	TWA-TLV	STEL-TLV
Water	7732-18-5	to 100			
Dimethyl Benzyl Ammonium Chloride	8001-54-5	1.60			
Nonionic Surfactant	9016-45-9	0 to 5			
Sodium Metasilicate	6834-92-0	0 to 5			
Tetrasodium EDTA	64-02-8	0 to 5			
Perfume Oil	N/A	0 to 5			
Dye	N/A	0 to 5			

SECTION 3-PHYSICAL DATA

Boiling Point (°F): 210 F.
Vapor Pressure: 20mm Hg @ 68 F.
% Volatile: 90+
Solubility in Water: Complete
Physical Description: Thin liquid with pleasant odor.

Specific Gravity: 1.016
Vapor Density (Air=1): >1
pH: 12.5-13.0
Evaporation Rate (Water=1): <1

SECTION 4-FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): N/A
Upper Explosion Limit: N/A
Extinguishing Media: N/A
Special Firefighting Procedures: Non Flammable
Unusual Fire and Explosion Hazards: N/A

SECTION 5-REACTIVITY DATA

Stability: Stable
Hazards Decomposition Products: Will not occur.

Hazardous Polymerization: None
Incompatibility (Materials to Avoid): None

SECTION 6-STORAGE AND HANDLING INFORMATION

Keep out of reach of children. Avoid contact with eyes, skin and clothing. Wash thoroughly after use. For use by trained personnel only. Keep container closed during storage. For institutional and industrial use only. Avoid contact with eyes, skin and clothing. Use in well-ventilated area.

SECTION 7-HEALTH HAZARDS AND FIRST AID

Effects of Overexposure:

Skin: Moderate skin irritant. Prolonged or repeated contact may cause dermatitis.

Eyes: Eye irritant. Liquid and mists may injure the eyes, causing corneal damage.

Inhalation: N/A

Ingestion: May be irritating to the mouth, throat, and gastrointestinal system.

Burning, pain, and diarrhea expected with large doses.

First Aid Procedures:

Skin: Remove contaminated clothing. Flush affected areas with large quantities of water. Seek medical attention if irritation persists.

Eyes: Flush with large quantities of water, holding eyelids open. Seek medical attention.

Inhalation: N/A

Ingestion: Give large quantities of milk and water. Seek medical attention immediately.

SECTION 8-SPECIAL PROTECTION INFORMATION

Respiratory Protection: No special requirements.

Ventilation Requirements: No special ventilation required.

Protective Gloves: Chemical resistant rubber or neoprene.

Eye Protection: Safety glasses or chemical splash goggles.

Other Protective Equipment: Eye wash station should be available nearby.

SECTION 9-SPILL OR LEAK PROCEDURES

Steps to be taken in Case Material is Released or Spilled: Floors will become slippery. Avoid walking in product. Keep unessential personnel away. Mop up or otherwise absorb and hold disposal. Avoid discharge to sewer or open waterways.

Waste Disposal Method: Any method in accordance with local, state and federal laws. Best method is to recycle or reuse for intended purpose. Consult local authorities for disposal in public sewer. Do not dispose of into storm drain, stream, river or to ground. Rinse container thoroughly before discarding in trash.

SECTION 10-REGULATORY INFORMATION

SARA Title III - Section 311/312 -Hazard**Categories:**

No - Fire Hazard

No - Sudden Release of Pressure Hazard

No - Reactivity Hazard

Yes - Immediate (acute) Health Hazard

No - Delayed (chronic) Health Hazard

Shipping Information:

FOR CONTAINERS > 1 Gallon : Cleaning Compound

FOR 1 GALLON CONTAINERS : Cleaning Compound

FOR CONTAINERS < 1 GALLON : Cleaning Compound

HMIS Hazardous Materials**Identification System**

Health	2
Flammability	0
Reactivity	0
Personal Protection	B

FOR EMERGENCY MEDICAL OR TRANSPORT INFORMATION: CHEM-TEL, Inc. @ 800-255-3924 (24 hours, 7 days per week)

This product contains the following toxic chemical(s) subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

CAS#	Chemical Name	Percent by Weight
	None	
This product contains the following chemical(s) which have been established to be either a carcinogen or suspected carcinogen.		
CAS#	Chemical Name	Percent by Weight
	None	

SECTION 11-OTHER INFORMATION

This company cannot anticipate all conditions of handling and use of this product. Therefore, this company accepts no responsibility for results obtained by the application of this information, or the safety and suitability of our products either alone or in combination with other products. It is the responsibility of the user to provide a safe workplace, using the health and safety information contained herein as a guide. This company will accept no liability for damages or loss incurred from the improper handling and use of this product