



The Clorox Company
1221 Broadway
Oakland, CA 94612
Tel. (510) 271-7000

2520-19

Material Safety Data Sheet

I Product: COMMERCIAL SOLUTIONS™ FORMULA 409® GLASS & SURFACE CLEANER	
Description: CLEAR PURPLE LIQUID WITH CITRUS SCENT	
Other Designations	Distributor Clorox Professional Products Company 1221 Broadway Oakland, CA 94612
Emergency Telephone Nos. For Medical Emergencies call: (800) 446-1014 For Transportation Emergencies Chemtrac (800) 424-9300	

II Health Hazard Data

Eye contact may result in temporary conjunctival redness. Overexposure to this product may cause the Worker Exposure Limit of 2-butoxyethanol to be exceeded. 2-Butoxyethanol has been shown to cause red blood cell hemolysis in laboratory animals and secondary injury to the kidney and liver. However, humans appear to be resistant to this effect. No medical conditions are known to be aggravated by exposure to this product.

FIRST AID:
EYE CONTACT: Flush eyes with plenty of water for 15 minutes. If irritation persists, call a physician.
SKIN CONTACT: Wash skin with water.
INGESTION: Drink a glassful of water. Call a physician.
INHALATION: Remove to fresh air. If breathing problems develop, call a physician.

III Hazardous Ingredients

Ingredient	Concentration	Worker Exposure Limit
Isopropyl alcohol CAS # 67-63-0	2 - 7%	400 ppm - TLV-TWA ^a 400 ppm - PEL ^b 500 ppm - TLV-STEL ^c
2-Butoxyethanol CAS # 111-76-2	1 - 5%	25 ppm - skin TLV-TWA ^a 50 ppm - skin PEL ^b

Note that 2-butoxyethanol can be absorbed through the skin. This may contribute to overall exposure.

^aTLV-TWA = ACGIH Threshold Limit Value - Time Weighted Average
^bPEL = OSHA Permissible Exposure Limit - Time Weighted Average
^cTLV-STEL = ACGIH Threshold Limit Value - Short Term Exposure Limit

None of the materials in this product are on the IARC, OSHA, or NTP carcinogen lists.

IV Special Protection and Precautions

Hygienic Practices: Wash hands after direct contact.

Engineering Controls: Use local exhaust to minimize exposure to product mist.

Personal Protective Equipment: Wear safety glasses. Wear rubber or neoprene gloves if there is the potential for repeated or prolonged skin contact.

Note: Do not use on film-tinted windows. On painted surfaces and wall coverings, test a small inconspicuous area before use.
HMIS: H=0, F=2, R=0, PP=B

HMIS Hazard Scale: 1=slight 2=moderate 3=serious 4=severe

V Transportation and Regulatory Data

DOT: Not restricted per 49 CFR 173.120(a)(3) and Appendix H.
IMDG: Not restricted per IMDG Code Page 0016 Paragraph 5.1.3.1.1.
IATA: Not restricted per IATA D.G.R. Sections 3.3.1.2 and 3.3.5.
TSCA Status: All components of this product are on the TSCA inventory.
EPA - SARA Title III/CERCLA: This product is regulated under Sections 311/312. This product contains no chemicals which are regulated under Section 313 and contains glycol ethers (<5%), ammonium hydroxide (CAS #1336-21-8, <1%), and ammonium carbamate (CAS #1111-78-0, <1%) which are regulated under Section 304/CERCLA.

VI Spill Procedures/Waste Disposal

Spill Procedures: Absorb and containerize. Wash residual down to sanitary sewer. Contact the sanitary treatment facility in advance to assure ability to process washed-down material.

Waste Disposal: Dispose of in accordance with all applicable federal, state, and local regulations.

VII Reactivity Data

Stable under normal use and storage conditions.

VIII Fire and Explosion Data

Flash Point: ~122°F (Tag dosed cup)
Fire Extinguishing Agents: Dry chemical, carbon dioxide (CO₂), foam or water spray.

IX Physical Data

pH~9.5
Specific gravity.....~1.0
Solubility in waterSoluble