



MATERIAL SAFETY DATA SHEET (MSDS)

Enol Plus Germicidal Detergent

Germicides



SECTION I ▶ PRODUCT IDENTIFICATION					
Product Name		Product Type		WHMIS Classification	
Enol Plus		Germicidal Detergent		Exempt	
SECTION II ▶ HAZARDOUS INGREDIENTS					
Chemical Name		Cas Registry No.	%	Toxicity	
O-Benzyl-p-Chlorophenol		000120-32-1	1-5	LD ₅₀ ORAL (RAT) 5000 mg/kg	
O-phenyl-phenol		90-43-7	3-7	LD ₅₀ ORAL (RAT) 5000 mg/kg	
SECTION III ▶ PHYSICAL DATA					
Appearance	Odour	pH	Boiling Point	Specific Gravity	Solubility in Water
Clear colourless liquid	Unscented	10.5	100 °C	1.0	100 %
SECTION IV ▶ FIRE AND EXPLOSION HAZARD DATA					
Flash Point (°C): None			Extinguishing media: Not Applicable		
Special fire fighting procedures: None					
Unusual fire and explosion hazards: None					
SECTION V ▶ TOXICOLOGICAL PROPERTIES					
HAZARD RATING: Health = 2 Flammability = 0 Reactivity = 1					Rating System 0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme
Swallowing: Slightly Toxic					
Inhalation: Not Applicable					
Skin Absorption: Unknown					
Skin Contact: Light to moderate irritant					
Eye Contact: Irritant					
Special Warning: None					
SECTION VI ▶ FIRST AID MEASURES					
Ingestion: Do not induce vomiting. Promptly drink large quantities of milk, egg whites, gelatin or water. Avoid alcohol. Call a physician immediately.					
Inhalation: Remove to fresh air. Call a physician.					
Skin: Flush with water for at least 15 minutes. Call a physician					
Eyes: Flush with water for at least 15 minutes. Call a physician.					
SECTION VII ▶ REACTIVITY DATA					
Stable: Yes					
Conditions to avoid: None					
Incompatibility with other materials: Strong acids.					
Hazardous decomposition products: None					
Hazardous polymerization: Will not occur.					
SECTION VIII ▶ PREVENTIVE MEASURES					
Hand protection: Chemical resistant gloves					
Eye protection: Safety glasses with side shields					
Ventilation: General					
Respiratory protection: None					
Other protective equipment: In case of spills, wear chemical resistant apron and boots.					
Steps to be taken in case material is released or spilled: Mop up spillage. Rinse spill area with water and allow to dry.					
Waste disposal method: Flush with water into waste systems in accordance with municipal, provincial and federal regulations.					
Precautions to be taken in handling and storage: Normal handling processes. Inside storage at 4-40 °C recommended.					
Other precautions: Follow label use instructions.					
UN: 1903		TDG Class: 8		Packing Group: III	
TDG Emergency Telephone Number: 613-996-6666 (COLLECT)					
SECTION IX ▶ PREPERATION DATA					
Prepared by: D.R. Dunlop			Last updated: December 1, 2009		
Location: Dustbane Products Limited, 25 Pickering Place, Ottawa, Ontario, K1G 5P4 – 613-745-6861					

Enol Plus

Germicidal Detergent

“ENOL PLUS may be used wherever high level hard surface disinfection is required including hospital, nursing homes, food preparation areas, clinics, dental offices, schools, day care centres, nurseries, etc.”

HOW TO USE

ENOL PLUS may be used on all inanimate objects that are washable with water, non-resilient or resilient floors including sealed wood or sealed cork floors, showers, locker rooms, and contaminated areas in hospitals. Apply by wiping, mopping or scrubbing, thoroughly wetting the surface with the recommended use dilution.

Disinfection:

For all types of cleaning and disinfecting:13 ml of ENOL PLUS per litre (1:80) of potable water
At the above dilution, ENOL PLUS is effective against Staphylococcus aureus, Salmonella choleraesuis and Pseudomonas aeruginosa. Germicidal performance against the above organisms has been confirmed by the AOAC Fungicidal test. Tuberculocidal performance against Trichophyton mentagrophytes was determined by the AOAC Fungicidal test. Fungicidal performance against Trichophyton mentagrophytes was determined by the AOAC Fungicidal test. Tuberculocidal performance against Mycobacterium tuberculosis was determined by the AOAC Tuberculocidal activity test. Read the product label for more thorough instructions.

MICROBIOLOGY EFFICACY DATA SUMMARY

A) Claim : AOAC use-dilution test

Test conditions: 200 PPM Hard Water (As CaCO₃) 5% organic soil - (Blood Serum) at a use dilution of 1:80 ENOL PLUS gives 1018 PPM Germicidal activity.

Organism	ATCC#	Dilution	Replicates	Results
Pseudomonas aeruginosa	15442	1:80	60, 60, 60	0/60, 0/60, 0/60
Staphylococcus aureus	6538	1:80	60, 60, 60	0/60, 0/60, 0/60
Salmonella choleraesuis		1:80	60, 60, 60	0/60, 0/60, 0/60

B) Claim : Tuberculocidal test

Test conditions: 200 PPM Hard water (As CaCO₃) 5% organic soil - (Blood Serum) Tuberculocidal test

Organism	Dilution	Carriers growth/INOC	Subculture growth/INOC
Mycobacterium smegmatis	1:80	0/10	0/10
Mycobacterium tuberculosis	1:80	0/20	0/20

C) Claim: Fungicide - AOAC disinfectants fungicidal test

Test conditions: 400 PPM Hard water (As CaCO₃) 5% organic soil - (Blood Serum)

Organism	ATCC#	Dilution	Replicates	Results (minutes)		
				5	10	15
Trichophyton mentagrophytes	9533	1:80	4	++	00	00

D) Additional support data : Manufacturers of the anti-microbial ingredients have provided additional data to support efficacy against other micro-organisms listed below:

O-Phényl Phénol : At a 1:80 end use dilution concentration of ENOL PLUS there are 885 ppm of O-Penyl Phenol

O-Benzyl P-Chlorophenal : At a 1:80 end use dilution concentration of ENOL PLUS there are 394 ppm of O-Benzyl P-Chlorophenal

SPECIFICATIONS

O-Benzyl P-Chlorophenal : 3.15%

O-Phenylphenol : 5.00%

Appearance : Clear red liquid

Odour : Phenolic

pH (conc.) : 12.5

pH (1:80) : 10.4

Viscosity : As water

W.H.M.I.S Classification : Exempt

T.D.G. Classification : 8

D.I.N. Registration : 00646635

P.C.P. Registration : 16306