



SAFETY DATA SHEET (SDS)

CLINGIN'

Date Revised : 01 / 15

Supersedes : 04 / 08

**CITRIC ACID – based
TOILET BOWL CLEANER**

SECTION 1 : IDENTIFICATION OF SUBSTANCE / COMPANY

PRODUCT NAME / IDENTIFIER :

PRIMARY APPLICATION / RECOMMENDED USAGE :

DISTRIBUTED EXCLUSIVELY BY :

INFORMATION TELEPHONE :

EMERGENCY TELEPHONE :

USAGE RESTRICTIONS :

“ CLINGIN’ ” – Citric Acid – based Toilet Bowl Cleaner :

A Non-fuming , Full-bodied Toilet Bowl & Porcelain Cleaner which cleans, de- scales, and makes porcelain surfaces “sparkle” through a residual “clinging” action .

HEALTHY CLEAN BUILDINGS

4 Wilmington Drive

Melville, New York 11747

1-631-643-1882

1- 516-377-7772

Refer to Product label

SECTION 2 : HAZARD(S) IDENTIFICATION

Classification of the substance or mixture (GHS-US) :

NOTE : Prolonged contact with skin or eyes may cause minor physical irritation . Ingredients used to make this product are not acutely toxic .

Label Elements

Hazard Pictograms

(GHS-US Labeling)



Skin & Eye Irritant

Signal Word :

Warning

Hazard Statements :

H303 : May Be Harmful If Swallowed .

H316 : May Cause Mild Skin Irritation .

H320 : May Cause Eye Irritation .

Precautionary Statements : P101 : If medical advice is required, have product container or label available .

P102 Keep Out of Reach of Children

P103 . Read Label Before Use .

P264 : In the Event of Direct Contact , Wash Hands and Forearms Thoroughly After Handling

P305+P351+P338 – If In Eyes via Direct Contact , Rinse Cautiously with Water for Several Minutes .

If Easy To Do, Remove Contact Lenses .Continue Rinsing

P337+P313 – If Eye Irritation Persists , Get Medical Advice / Attention .

Other Hazards : None

Ingredients with Unknown Acute Toxicity : None



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SECTION 3 : COMPOSITION / INFORMATION ON INGREDIENTS :

Chemical characterization : Non-hazardous , citrus –based viscous liquid .

Component Disclosure :

<u>Ingredient :</u>	<u>CAS Number :</u>	<u>%</u>	<u>OSHA / PEL :</u>	<u>ACGIH / TLV :</u>
Citric – Acidic Detergent Concentrate	77-92-9	Trade Secret	N/E	N/E
Proprietary Surfactant Acid Blend	Not Established	Trade Secret	None	None
Deionized Water	7732-18-5	Trade Secret	None	None.

NOTE : Percentages and identities are withhold as trade secrets.

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SECTION 4 : FIRST AID MEASURES

Description of Necessary Measures :

General Advice Under Extreme Exposure : May be irritating to eyes . May cause skin and respiratory tract irritation . Consult a Medical Physician

After Inhalation : Supply fresh air . Perform artificial respiration if not breathing . If breathing is difficult , use oxygen treatment .Consult a doctor if adverse conditions persist .

After Skin Contact : Wash with plenty of soap and water for at least 15 minutes while removing contaminated clothing & shoes . Thoroughly clean and dry contaminated clothes and shoes before re-use . If skin irritation or rash persists, seek medical attention .

After Eye Contact : Prolonged exposure may cause mild irritation to the eye tissue if not removed . In case of extreme contact , immediately flush eyes with large quantities of warm running water for 15 minutes , lifting upper and lower lids occasionally . If easy to do, remove contact lenses . Continue water rinsing . Do Not allow individual to rub or keep eyes closed . If eye irritation persists, seek medical attention .

After Ingestion : May cause nausea . Rinse mouth with milk or water. DO NOT induce vomiting . If patient is fully conscious, continue to rinse mouth with milk or water and drink 2-3 glasses of milk or water .If adverse conditions persist , seek medical attention . Never give anything by mouth if victim is conscious , rapidly losing consciousness, or is convulsing .

NOTE : According to FHSA Method 16 CFR 1500 this product should not be a skin or eye irritant . Prolonged contact with eyes may cause minor physical irritation . Ingredients used to make this product are not acutely toxic .

SECTION 5 : FIRE FIGHTING MEASURES :

Flashpoint (°F, °C , PMCC) : Non Established = <212°F

Suitable Extinguishing Media : Water , Water Spray , Dry Powder ,
Foam , Carbon Dioxide (CO2)

Auto-ignition Temperature : 653°F (345°C)

Hazardous Decomposition Products : Carbon Oxides

Flammability : Not Flammable (Aqueous-based)

Unsuitable Extinguishing Media : None

Lower Flammable Limits : 8% at 149 °F (65 °C)

Upper Flammable Limits : Not Available

Special Protective Equipment for Fire Fighters : None



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SECTION 6 : ACCIDENTAL RELEASE MEASURES

Exercise caution from slipping on leaked / spilled product . Wipe up excess product with a disposable cloth . Rinse several times with water .
Leak and Spill Procedure : Collect excess product for disposal . Flush remaining product from spill with water to clean up residue . Absorb slurry with an appropriate liquid-binding absorbent (ie : sand, diatomite , universal binders , sawdust) .

Precautions To Be Taken in Handling & Storing : Protect from freezing . Product shelf life is best retained by storing at 45 -100 ° F .

Environmental Precautions : Make best efforts to prevent entry into sewers and public waters. This product contains no reportable quantities of toxic chemicals subject to reporting requirements of Section 313 of SARA Title III Emergency Planning and Community Right-To-Know Act of 1968 and of 40 CFR Part 372 .

SECTION 7 : HANDLING & STORAGE REQUIREMENTS

KEEP OUT OF REACH OF CHILDREN

Precautions for Safe Handling : Read product literature, label , and SDS before use . Use product strictly according to label directions . Wash hands and other exposed areas with soap and water before eating, drinking, smoking; or when leaving work . Provide adequate ventilation in storage area . Avoid contact with moist air and steam . Avoid personal contamination after a spill .

Hygiene Measures : Wash hands and forearms thoroughly after handling . Launder soiled, contaminated clothing before re-use .

Safe Storage Conditions : Keep in original container in a cool , well-ventilated place away from incompatible substances and open flames .
 Keep container closed when not in use.

Incompatible Products : Not Known

Incompatible Circumstances : Not Known

SECTION 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

Workplace Control Parameters : Relatively no effect if exposed in small amounts . Relative to other acidic materials, a single dose of this product is rarely toxic by inhalation or ingestion . When ingested in small amounts , a numbness of the mouth and/or irritation of the stomach can develop . After prolonged contact , eye irritation may occur . After repeated and / or prolonged contact with skin , dermatitis and skin sensitization may develop . Slight "redness" may develop on hands and forearms if individual has a history of dermal allergic reaction .

Engineering Controls : Facilities storing or utilizing this material should be equipped with an eyewash station and safety shower . Use adequate ventilation to keep airborne concentrations low .

Local Exhaust : Not required .

Exposure Limits :

<u>Chemical Name :</u>	<u>ACGIH :</u>	<u>NIOSH</u>	<u>OSHA – Final PELs</u>
Citric Acid (CAS # : 77-92-9)	None Listed	None Listed	None Listed

Exposure Controls :

Personal Protective Equipment : Avoid unnecessary exposure

Hand protection : Not necessary but good practice to wear chemical –resistant gloves

Eye Protection : Chemical goggles or safety glasses as described by OSHA Regulation 29 CFR 1910.133 or European Standard EN 166 .

Respiratory Protection : Not necessary but good practice to wear appropriate mask . Follow the OSHA Respirator Regulations found in 29CFR 1910.134 or European Standard EN 149 . Whenever necessary, always use a NIOSH or European Standard EN Approved Respirator .

Work / Hygienic Practices : Wash contaminated clothing before re-use .

Other Information : Do Not eat, drink, or smoke during use



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SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

Physical State : Liquid , Viscous	Color : Pink	Odor : Mild Citrus
pH (as is) : 1.6 +/-0.05	Relative Evaporation Rate : Equivalent to Water	Melting Point : Undetermined
Freezing Point : < 32 °F, < 0 °C	Boiling Point : >212 °F	Flashpoint : ≥ 200 °F
Solubility in Water : Miscible	Specific Gravity (Water = 1) : 1.07	Flammability : NA
Explosive Limits : Undetermined	Vapor Pressure : Equivalent to Water	Relative Density : Equivalent to Water
Partition coefficient : (n-octanol/water) Undetermined	Auto-ignition Temperature : Undetermined	Decomposition Temp. : Undetermined

SECTION 10 : STABILITY AND REACTIVITY

Reactivity : No Additional Information Available	Chemical stability : Stable under Normal Conditions
Possibility of Hazardous Reactions : Undetermined	Conditions to Avoid : Direct Sunlight , Extremely High or Low Temperatures
Incompatible Materials : High Alkalis / Sulfides	Hazardous Decomposition By-products : Carbon Monoxide , Carbon Dioxide
Oxidizing Agents , (inorganic) /Metal Nitrates /	Fumes Hazardous Polymerization : Should not occur
Alkali Carbonates/ Potassium,Tartrate /Acetates/ Bicarbonates	

SECTION 11 : TOXICOLOGICAL INFORMATION

Information on Toxicological Effects :

Likely Routes of Exposure :

Inhalation : No Irritant Effect	Skin Contact : No Irritant Effect . Sensitization possible through skin contact .
Eye Contact : Minor Irritating Effect	Ingestion : None Under Normal Use

Symptoms Related to the Physical, Chemical, and Toxicological Characteristics : No Further Information

Available Delayed and Immediate Effects (Chronic Effects from Short and Long Term Exposure) : No Further Information

Measures of Toxicity : No Further Information Available

Teratogenicity, Mutagenicity : No Data Available

Reproductive Toxicity : Not Classified

Specific Target Organ Toxicity (Single Exposure) : Not Classified

Specific Target Organ Toxicity (Repeated Exposure) : Not Classified

Carcinogenic Categories : This product does not contain any substances that are considered by ACGIH, OSHA, or NTP to be human carcinogens .

NTP (National Toxicity Program) : None of the Ingredients are listed as of this date .

IARC (International Agency for Research on Cancer) : None of the Ingredients are listed as of this date .

OSHA (Occupational Safety and Health Administration) : None of the Ingredients are listed as of this date .

Acute Toxicity :

<u>Product / Ingredients name</u>	<u>Result</u>	<u>Species</u>	<u>Exposure</u>
Citric Acid (CAS# 77-92-9)	LD50 / LC50	Rabbit	Eye : 750 ug / 24H (severe)
		Draize	Skin : 500 ug / 24H (mild)
		Test	
	LD50	Mouse	Oral = 5040 mg/kg
	LD50	Rat	Oral = 3 gm/kg



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TOXICOLOGICAL INFORMATION (continued)

Skin Corrosion / Irritation : Not classified
Skin Sensitization : Not classified , except for personal allergic reactions .
Serious Eye Damage / Irritation : Not classified
Respiratory Sensitization : Not classified

SECTION 12 : ECOLOGICAL INFORMATION

ENVIRONMENTAL ACCREDITATIONS : Listed in the USDA – Bio-Preferred Catalog



ECOTOXICITY :

Mobility : Completely Soluble
Persistence / Degradability Chemical Oxygen Demand (COD) : 750 (50 mg O₂ / g)
Biochemical Oxygen Demand Within 5 Days (BODS) : 625 (50 mg O₂ / g)
DIN 38412 Part 25 (DIN EN ISO 9880) : Readily biodegradable (98% after 2 days) *
Aquatic Toxicity :
DIN 38412 Part 15 (DIN EN ISO 7346) – Toxicity to Fish : 440 – 706 mg / L
DIN 38412 Part 5 (DIN EN ISO 7346) – Toxicity to Bacteria – 10,000 mg / L
Fish Toxicity : LC100-Goldfish-894 mg/L -Lifetime Exposure in Hard Water ; LD0 Goldfish-625 ,mg/L – Lifetime Exposure in Hard Water (Ellis, M.M. Detection and Measurement of Stream Pollution, 1937, 22, XLVII, 365 Brit. Fisheries Bulletin) ; Invertebrate Toxicity : LD100 Daphnia Magna- 120 mg/ L – Lifetime Exposure in Soft Water ; LD0 Daphnia Magna -80 mg/L – Lifetime Exposure in Soft Water ; Toxicity Threshold : Pseudomonas Putida > 10 g / L ; Scenedesmus Quadricauda -640 mg/L ; Entosiphon Sulcatum 485 mg/L (Bringmann G et al Water Res.1980, 14, 231-241) .
Environmental : Nitrification Inhibition . Nitrosomonas sp- 100 mg/L – No Inhibition of Ammonia Oxidation (Hockenbury, M.R. et al J.Water Polution Control Fed. 1799, 49 (5) , 768-777) . Degradation Studies : 70-100% Removal by Activated Sludge at 20°C for 120 hr. (Muto, N. et al Kenkyou Hokoku - Kanto Gakuin Daigaku Kogakuku , 1987, 31 (2) , 257-266 Japan .
Other : BODS 0.420 ; BOD20-0.610 ; ThOD – 0.686 mg/L O₂ respectively (Meinck, F. et al Les Eaux Residuaires Industrielles 1970) ; Biodegradable (Ministry of International Trade and Industry (MITI) Report, 1984, Japan) .
Terrestrial Toxicity :No Additional Information Available
Mobility in Soil :No Additional Information Available

OTHER ADVERSE EFFECTS :

Effect on Ozone LayerNo Additional Information Available
Effect on Global Warming :No Additional Information Available

SECTION 13 : DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations : Dispose in safe manner in accordance with local / state/federal regulations.
Dispose of contents / container in accordance with local/regional/national/international regulations . Can be incinerated with conventional waste stream after consulting with the waste disposal facility operator and the pertinent authorities while adhering to the necessary regulations .
Ecology – Waste Materials : Avoid release into environment .
Recommended Cleansing Agents : Water Only



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SECTION 14 : TRANSPORT INFORMATION

UN Number (DOT, IMDG, IATA) Not Regulated
 UN Proper Shipping Name (DOT, IMDG, IATA)Not Regulated
 Transport Hazard Class(es) (DOT, IMDG, IATA)Not Regulated
 Packing Group (DOT, IMDG, IATA)Not Regulated
 Environmental Hazards : Marine Pollutant (Yes/No)NO
 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code...Not Applicable
 Special Precautions for User :Not Applicable

SECTION 15 : REGULATORY INFORMATION

U.S. Federal Regulations :No Additional Information Available
 US-EPA (Environmental Protection Agency)None of the Ingredients are Listed

International Regulations :
 CANADA , EU-REGULATIONSNo Additional Information Available

SECTION 16 : OTHER INFORMATION

HMIS Rating		GHS classification ratings order of severity differ from NFPA and HMIS	
HEALTH	1	HMIS/NFPA Hazard Ratings	GHS Hazard Categories
FLAMMABILITY	0	0= Minimal Hazard	Cat 1 ~ Severe Hazard
PHYSICAL HAZARD	0	1= Slight Hazard	Cat 2 ~ Serious Hazard
PERSONAL PROTECTION	B	2= Moderate Hazard	Cat 3 ~ Moderate Hazard
		3= Serious Hazard	Cat 4 ~ Slight Hazard
		4= Severe Hazard	Cat 5 ~ Minimal Hazard

DISCLAIMER : This document is intended to provide a brief summary of our present knowledge and guidance regarding the use of this material . The information set forth herein has been compiled from sources to be dependable and is believed to be accurate as of the date of issuance . This information is offered in good faith by HEALTHY CLEAN BUILDINGS and no warranty, expressed or implied, is made . The user assumes all liability for any damage or injury resulting from misuse, from any failure to adhere to recommended practices according to product label (and such), or from any hazards inherent in the nature of the product . This document shall not constitute a guarantee for any specific product features and shall not establish a legally valid contracted relationship.

Footnotes : CALC-Calculated; COR-Corrosive; CS-Cancer Suspect Agent; EST-Estimated; HMIS-Hazardous Material Identification System; NA-Not Applicable; ND-No Data ; NE – Data Not Established; OX- Oxidizer; PEL-Permissible Exposure Limit; PPI-Personal Protection Index ; STEL-Short Time Exposure Limit; TLV-Threshold Limit Value; TS-Trade Secret ; TWA-Time Weighted Average