G.K. Chemical Specialties Co. Inc.
90 Barbados Blvd.
Scarborough, Ontario M1J 1K9
Tel: (416) 261-7182 Fax: (416) 261-5663

SAFETY DATA SHEET (SDS)

PRODUCT NAME: G-50 TOILET BOWL CLEANER	
HEALTH HAZARD RATING:	(3)- HIGH HAZARD NFPA Rating
FLAMMABILITY HAZARD RATING:	(0)- MINIMAL HAZARD
REACTIVITY HAZARD RATING:	(1)- LOW HAZARD
PERSONAL PROTECTION:	H - (Splash goggles, Gloves, Synthetic apron, Vapor respirator)
HAZARD ALERT SIGN:	

SECTION 1 – IDENTIFICATION	
PRODUCT IDENTIFIER	
PRODUCT NAME	G-50 TOILET BOWL CLEANER
MANUFACTURER'S NAME AND ADDRESS **EMERGENCY PHONE NO.**	G.K. Chemical Specialties Co. Inc. 90 Barbados Blvd. Scarborough, Ontario M1J 1K9 (416) 261-7182 / 905 427-7605/ 416-526-4037
SUPPLIER'S NAME AND ADDRESS **EMERGENCY PHONE NO.**	
CHEMICAL NAME	HYDROCHLORIC ACID SOLUTION
CHEMICAL FAMILY	INORGANIC ACID (Hydrochloric Acid solution)
TRADE NAME AND SYNONYMS	G-50 TOILET BOWL CLEANER 23 %
MATERIAL USE	COMMERCIAL AND INDUSTRIAL CLEANING

G.K. Chemical Specialties Co. Inc. has compiled the information and recommendations contained in this Safety Data Sheet from sources believed to be reliable and to represent the most reasonable current opinion on the subject when the SDS was prepared. Although reasonable precautions have been taken in the preparation of the data contained herein, it is offered solely for your information, consideration and investigation.

G.K. Chemical Specialties Co. Inc. extends no warranty and assumes no responsibility as to the accuracy of the content or sufficiency of the information and expressly disclaims all liability for reliance thereon. This SDS provides guidelines for the safe handling of this product. It does not and cannot advise on all possible situations, therefore, your specific use of this product should be evaluated to determine if additional precautions are required. Individuals exposed to this product should read and understand this information and be provided pertinent training prior to working with this product.

G.K. Chemical Specialties Co. Inc. assumes no responsibility for personal injury or property damage to vendors, users or third parties caused by the material. Such vendors or users assume all risks associated with the use of the material.

INGREDIENTS. This SDS, under section of Ingredients, contains all ingredients listed under INGREDIENT DISCLOSURE LIST P.C. 1987-2719, 20/1/88 CANADA GAZETTE PART II VOL. 122, No 2 of HAZARDOUS PRODUCT ACT.
Percentage range of concentration of ingredients is expressed as percentage by weight of the total weight of the product. Ingredient List does not necessarily list all ingredients in the formulation and does not necessarily list all ingredient range of concentration, other than ingredients under the Disclosure List.

T.L.V. (units) or Threshold Limit Values refer to the limiting concentrations recommended by the Ministry of Labour. These values were adopted by the American Conference of Governmental Industrial Hygienists (A.C.G.I.H.). The figures refer to time-weighted average concentrations as P.P.M. (V/V) or mg/m^3 for a normal working day or at any time for some materials.

"C.A.S REG. No." means the identification number assigned to a chemical substance by the Chemical Abstracts Service Division of the American Chemical Society.

"LC 50" means the concentration of a substance in air that when administered by means of inhalation over a specified length of time in an animal assay, is expected to cause the death of 50 per cent of a defined animal population.
"LD 50" means the single dose of a substance that, when administered by a defined route in an animal assay, is expected to cause death of 50 per cent of a defined animal population.

FLASH POINT. The minimum temperature at which a substance gives off flammable vapors which in contact with spark or flame will ignite.

NIOSH- National institute for occupational safety and health
STEL- Short term exposure limit
TWA- Time-weighted average
PEL- Permissible exposure limit
ACGIH- American conference of governmental industrial hygienist
OSHA- Occupational safety and health act

SECTION 2 – HAZARD IDENTIFICATION

Dangerous Goods: **WHMIS:** Hazard Class D. DIV. 2A AND 2B, CLASS E

GHS CLASSIFICATION
Acute Toxicity (inhalation-Dust/Mists) – Category 1
Acute Toxicity (oral, dermal) – Category 4
Eye Damage/ Irritation –Category 1
Skin Corrosion/Irritation – Category 1, Category 1A
Respiratory Sensitization – Category 2
Specific Target Organ Toxicity (Repeated Exposure) – Category 3
Specific Target Organ Toxicity (single exposure) – Category 3
Toxic to the Aquatic Environment- Acute Hazard – Category 1
Metal Corrosion- Category 1

HAZARDOUS SUBSTANCE (HSNO) CLASSIFICATION
Toxic liquid Class D, DIV 2A AND 2B
Corrosive liquid Class E

GHS Label Elements, including precautionary statements: Hazard Statements:
Signal word- DANGER

HAZARD STATEMENTS
H314: Causes severe skin burns and eye damage,H318: Causes serious eye damage
H335: May cause respiratory irritation, H302: Harmful if swallowed
H330: Fatal if inhaled, H370: Causes damage to organs
H290: May be corrosive to metals

PREVENTION
P261- Avoid breathing dust/fumes/gas/mist/vapors/spray
P280: Wear protective gloves/ protective clothing/ eye protection/ face protection
P405: Store locked up
P403 + P233: Store in a well- ventilated place. Keep containers tightly closed

RESPONSE
P305+P351+P338- IF IN EYES: Rinse cautiously with water for several minutes: Remove contact lenses if present and easy to do so. Continue rinsing.
P301 + P310: If swallowed: Immediately call a POISON CENTER or doctor/ physician.
P301 + P330 + P331" IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P304 +P340 + P310: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician
P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water. Shower

POTENTIAL HEALTH EFFECTS
INHALATION: May be harmful if inhaled. Causes respiratory tract irritation.
SKIN: Causes skin irritation and/ or chemical burns.
EYE: Will cause serious damage
INGESTION: May be fatal if swallowed

H400: Very toxic to aquatic life
P273: Avoid release to the environment

SECTION 3 – **COMPOSITION/INFORMATION ON INGREDIENTS**				
HAZARDOUS INGREDIENTS	**APPROXIMATE CONCENTRATION%**	**C.A.S., N.A. OR U.N. NUMBERS**	**LD50 {SPECIFY SPECIES & ROUTE}**	**LC 50 {SPECIFY SPECIES & ROUTE}**
Hydrochloric acid Ethoxylated Lauryl Alcohol Water, inert	23 % by weight < 1 % Balance	7647-01-0 9002-92-0	Oral(Rat): 700 mg/kg Dermal (Rabbit): 5010mg/kg. for HCL ACGIH TLV= 5 ppm (7.59 mg/m^3 for HCL NIOSH IDLH= 50 ppm (as HCL)	Lethal Concentration: 3124 ppm (Rat) 1 h

SECTION 4 – **FIRST AID MEASURES**	
SKIN CONTACT	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention if necessary.
EYE CONTACT	Immediately hold eyelids open and flush with water for at least 15 minutes. Seek medical attention.
INHALATION	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention if necessary
INGESTION	Harmful if swallowed. Do not induce vomiting. Drink 1 or 2 glasses of water. Seek immediate medical attention. Never give anything by mouth to an unconscious or convulsing person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.
NOTES TO PHYSICIAN	Product is corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with frothy sputum, and high pulse pressure. Treat symptomatically

SECTION 5 – **FIRE-FIGHTING MEASURES**	
FLASH POINT (^{0}C)	Nil
FLASH POINT METHOD	Not applicable
AUTOIGNITION TEMPERATURE (^{0}C)	Non-combustible
UPPER FLAMMABLE LIMIT (% VOL.)	Not applicable
LOWER FLAMMABLE LIMIT (% VOL.)	Not applicable
HAZARDOUS COMBUSTION PRODUCTS	Not applicable
UNUSUAL FIRE/ EXPLOSION HAZARDS	Releases flammable hydrogen gas when reacting with metals
SENSITIVITY TO MECHANICAL IMPACT	No.
SENSITIVITY TO STATIC DISCHARGE	No
EXTINGUISHING MEDIA	Use extinguishing agents compatible with acid and appropriate for the burning material. Use water spray to keep fire-exposed containers cool
SPECIAL FIRE FIGHTING PROCEDURES	Fire fighters should wear full protective clothing, including self-contained breathing equipment. The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. To neutralize this product use Soda ash or slaked lime.

SECTION 6 – ACCIDENTAL RELEASE MEASURES	
LEAK AND SPILL PROCEDURE	Stop leak. Move containers from spill area. Absorb spill with vermiculite absorbent material, neutralize the residue with a dilute solution of Sodium Carbonate, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. LARGE SPILL: Corrosive liquid. Stop leak if without risk. Do not touch spilled material. Use water spray curtain to knock down vapor drift. Neutralize the residue. Be careful that vapor is not present at a concentration level above TLV
ENVIRONMENTAL PRECAUTIONARY	Prevent entry into sewers or streams. Any release to the environment should be subject to federal or local reporting requirements.
PERSONAL PRECAUTIONARY MEASURES	Wear protective clothing during cleanup. See section 8 for recommendations on the use of personal protective equipment. Avoid breathing vapors, mist or gas. Avoid contact with clothing and skin

SECTION 7 – HANDLING AND STORAGE	
HANDLING PROCETURES	Avoid contact with eyes. Avoid ingestion. Use good industrial hygiene practices in handling this product. Keep container closed when not in use. Use only with adequate ventilation
STORAGE NEEDS	Keep container tightly closed. Store in a cool area. Keep out of the reach of children. Keep in properly labeled containers .

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION	
VENTILATION REQUIREMENTS	Good ventilation is recommended. When TLV (Threshold Limit Value over 8 hours of work) is greater than 5 ppm (7.59 mg/ m^3) provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective. NIOSH IDLH= 50 ppm, (as HCL)
PROTECTIVE EQUIPMENT	Ensure that eyewash stations are proximal to the work-station location. The selection of personal protective equipment will vary depending on the condition of use
EYE/TYPE	Splash goggles
RESPIRATORY/TYPE	Approved/ certified vapor respirator when airborne concentration exceed exposure limits.
GLOVE/TYPE	Nitrile, Vinyl, Butyl impervious gloves
FOOTWEAR/TYPE	Boots. Chemical resistant and as specified by the workplace
BODY/TYPE	Protective clothing is required. Use impervious clothing (apron, coveralls). The selection of personal protective equipment will vary depending on the conditions of use.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES	
APPEARANCE – PHYSICAL STATE	Slightly milky, thin liquid
ODOUR	Strong pungent, irritating
ODOUR THRESHOLD (PPM)	1-5 PPM detection
PH	<1, strong acid

MELTING POINT (^{0}C)	See freezing point
BOILING POINT (^{0}C)	>100^{0}C (212^0 F) INITIAL
FREEZING POINT (^{0}C)	-30^{0}C (-22^0 F)
EVAPORATION RATE	>1.00 (n-Butyl Acetate)
FLAMMABILITY	Not combustible
FLASH POINT (^{0}C)	Not applicable
AUTO IGNITION TEMPERATURE	Not available
DECOMPOSITION TEMPERATURE	Not available
VAPOUR DENSITY	(air= 1) 1.267 @ 20^{0}C
VAPOUR PRESSURE	@ 20^{0}C 84 mmHg
SOLUBILITY	Completely soluble in water
VISCOSITY	Thin liquid
% VOLATILE BY VOLUME	Not available
SPECIFIC GRAVITY	1.13 ± 0.02 gm / cm^3 @ 20^{0}C

SECTION 10 – STABILITY AND REACTIVITY	
REACTIVITY	Exothermic reaction with incompatible materials
CHEMICAL STABILITY	Stable under normal conditions
POSSIBILITY OF HAZARDOUS REACTIONS	Arise in contact with incompatible materials. Forms flammable and explosive Hydrogen gas through corrosion of metals.
CONDITIONS TO AVOID	Avoid incompatible materials
INCOMPATIBLE MATERIALS	Avoid contact with strong oxidizers, strong bases, metals, metal oxides, amines, carbonates other alkaline materials. Also perchlorates, nitrates, peroxides, carbides, cyanides, sulfides, permanganates, aldehydes, vinyl methyl ether and salts of oxyhalogenic acids
HAZARDOUS DECOMPOSITION PRODUCTS	Hydrogen Chloride gas, Chlorine gas, Carbon Dioxide ($C0_2$), Carbon monoxide.

SECTION 11 –TOXICOLOGICAL INFORMATION	
TOXICITY EFFECTS ON ANIMALS	Acute oral toxicity (LD50): 900 mg/kg (Rat), LD50 dermal (Rabbit) 5010 mg/kg, LC50-Inhalation (Rat) :3124 ppm (1 hour). Figures for Hydrochloric acid
TOXIC EFFECTS ON HUMANS	**Inhalation**: May cause chemical burns to the respiratory tract, leading to sore throat, coughing, shortness of breath and delayed lung edema. **Ingestion**: May cause circulatory system failure. Causes severe digestive tract burns with abdominal pain, vomiting, and possible death. May cause corrosion and permanent tissue destruction of the esophagus and digestive tract. **Skin contact**: May be absorbed through the skin in harmful amount. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. Contact with liquid is corrosive and causes severe burns and ulceration **Eye contact**: May cause irreversible eye injury. Contact with liquid is corrosive to the eyes and causes severe burns.
CHRONIC EFFECTS ON HUMANS	Prolonged contact with skin may defat tissue causing dermatitis or skin problems.
CARCINOGENICITY	No evidence
TERATOGENICITY	No data available
MUTAGENICITY	No evidence
REPRODUCTIVE EFFECTS	No evidence

SECTION 12 –ECOLOGICAL INFORMATION	
ECOTOXICITY DATA	**Figures for Hydrochloric acid.** Ecotoxicity in water (LC50): 282 mg/l 96 hours Mosquito fish, EC50/48h/Bluegill: 3.6mg/L. LC50/ salt water: 100-300 ppm/48 h/ shrimp .Because of the low PH of this product, it would be expected to produce significant ecotoxicity upon exposure to organisms and aquatic system. Most aquatic species do not tolerate PH lower than 5.5 for extended period. Dangerous to aquatic life in high conc.
BIODEGRADABILITY	Does not bioaccumulate. Hydrochloric acid dissociates in water and lowers the PH of water. It will be neutralized by naturally occurring alkalinity in water and soil. Not biodegradable. Biological Oxygen Demand (BOD): None
PRODUCTS OF DEGRADATION	Gets neutralized to chloride by alkalinity present in natural environment.

SECTION 13 – DISPOSAL CONSIDERATIONS	
WASTE DISPOSAL	Disposal of all wastes must be done in accordance with municipal, provincial and federal regulations
INFORMATION ON SAFE HANDLING FOR DISPOSAL INCLUDING ANY CONTAMINATED PACKAGING	Suitable waste facility

SECTION 14 – TRANSPORT INFORMATION	
UN NUMBER	1789
UN PROPER SHIPPING NAME	HYDROCHLORIC ACID (23%)
TRANSPORT HAZARD CLASS	CLASS: 8 (CORROSIVE)
PACKAGING GROUP	II
ENVIRONMENTAL HAZARDS	YES
TRANSPORT IN BULK, if applicable	NOT AVAILABLE
SPECIAL PRECAUTIONS	Guide to Canadian Transportation/ Emergency Response Guidebook (ERG): # 157

SECTION 15 – REGULATORY INFORMATION	
SAFETY HEALTH & ENVIRONMENTAL REGULATIONS SPECIFIC TO THE PRODUCT	U.S. TSCA inventory Status: All components of this product are either on the Toxic Substances Control Act (TSCA) INVENTORY List or exempt. Canadian DSL Inventory Status: All components of this product are either on the Domestic Substances List (DSL) or the Non-Domestic Substances List (NDSL) or exempt.

SECTION 16 – OTHER INFORMATION	
PREPARED BY:	Gus Kaklamanos - Chemist
TELEPHONE NO.:	416-261-7182
DATE OF THE LATEST REVISION OF SDS:	**August 25, 2021**

NOTE: A lot of the information provided in this SDS may refer to very large or special usage of the product. The basic purpose of this product is to be used as toilet bowl cleaner, where quantities stored and used at any time by various users are very small.