



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

Material safety data SHEET

PRODUCT NAME: G-50 Toilet Bowl Cleaner

HEALTH HAZARD RATING:	SERIOUS HAZARD - major injury likely unless prompt action is taken and medical treatment is given
FLAMMABILITY HAZARD RATING:	MINIMAL HAZARD - materials which are normally stable and will not burn unless heated
REACTIVITY HAZARD RATING:	MINIMAL HAZARD - materials, which are normally stable, even under fire conditions, and which will not react with water.
PERSONAL PROTECTION:	Safety glasses + gloves + synthetic apron
HAZARD ALERT SIGN:	HEALTH HAZARD - Extreme danger FIRE HAZARD - Will not burn REACTIVITY - Stable SPECIFIC HAZARD - Corrosive

SECTION I - MATERIAL IDENTIFICATION AND USE / IDENTIFICATION DE LA MATIÈRE ET USAGE

MATERIAL NAME / IDENTIFIÉRIER - NOM / IDENTIFICATION DE LA MATIÈRE

G-50 Toilet Bowl Cleaner 23% Acid

MANUFACTURER'S NAME AND ADDRESS/ NOM DU FABRICANT - ADRESSE EMERGENCY PHONE NO. / N° DE TÉLÉPHONE D'URGENCE	G.K. Chemical Specialties Co. Ltd. 90 Barbados Blvd. Scarborough, Ontario M1J 1K9 (416) 261-7182 / 905 427-7605
SUPPLIER'S NAME AND ADDRESS/ NOM DU FOURNISSEUR - ADRESSE EMERGENCY PHONE NO. / N° DE TELEPHONE DURGENCE	
CHEMICAL NAME / DÉNOMINATION CHIMIQUE	Muriatic Acid Solution
CHEMICAL FAMILY / FAMILLE CHIMIQUE	Acid
CHEMICAL FORMULA / FORMULE CHIMIQUE	Not Applicable
TRADE NAME AND SYNONYMS / APPELLATION COMMERCIALE ET SYNONYMES	Not Applicable
MOLECULAR WEIGHT / POIDS MOLÉCULAIRE	Not Applicable
MATERIAL USE / UTILISATION DE LA MATIÈRE	Cleaning Toilet Bowls

G.K. Chemical Specialties Co. Ltd. has compiled the information and recommendations contained in this Material Safety Data Sheet from sources believed to be reliable and to represent the most reasonable current opinion on the subject when the MSDS 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. Ltd. 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 MSDS 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. Ltd. 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 MSDS, 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/m³ 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.

SECTION II – HAZARDOUS INGREDIENTS OF MATERIAL / INGRÉDIENTS DANGEREUX DE LA MATIÈRE

HAZARDOUS INGREDIENTS / INGRÉDIENTS DANGEREUX	APPROXIMATE CONCENTRATION% CONCENTRATION APROXIMATIVE %	C.A.S., N.A. OR U.N. NUMBERS / NUMERO CAS NA OU CNU	LD50 {SPECIFY SPECIES & ROUTE} DL50 {PRÉCISER L'ESPECE ET LA VOIE D'ADMINISTRATION}	LC 50 {SPECIFY SPECIES & ROUTE} CL50 {PRÉCISER L'ESPECE ET LA VOIE D'ADMINISTRATION}
Hydrogen Chloride Non Ionic Surfact Opacifier Water, Inert	23 0.0-1 0.0-1 Balance	7647-01-0 Non hazardous Non hazardous Non hazardous	Short term inhalation limits for Hydrogen Chloride: 5PPM for 5 min. Threshold Limit Value: 5PPM	
< = Less Than				

SECTION III – PHYSICAL DATA FOR MATERIAL / CARACTÉRISTIQUES PHYSIQUES DE LA MATIÈRE

PHYSICAL STATE / ÉTAT PHYSIQUE	Liquid
ODOUR AND APPEARANCE / ODEUR ET APPARENCE	Milky Liquid, Pungent & Irritating Odour
ODOUR THRESHOLD (P.P.M.) / SEUIL DE L'ODEUR (PPM)	10 PPM
SPECIFIC GRAVITY / DENSITE RELATIVE	1.05 ± 0.4 gm/cm ³
VAPOUR PRESSURE [MM] / TENSION DE VAPEUR [MM]	< 25 at 20 °C
VAPOUR DENSITY [AIR = 1] / DENSITE DE VAPEUR [AIR =1]	~ Water
EVAPORATION RATE / TAUX D'ÉVAPORATION	~ Water
BOILING POINT [°C] / POINT D'ÉBULLITION [°C]	100 °C
FREEZING POINT [°C] / POINT DE CONGELATION [°C]	< -5 °C
SOLUBILITY IN WATER [20°C] / SOLUBILITÉ DANS L'EAU [20°C]	Infinite
% VOLATILE [BY VOLUME] / % VOLATILITÉ [PAR VOLUME]	76 ± 1%
PH	0.5 ± 0.2
COEFFICIENT OF WATER / OIL DISTRIBUTION / COEFFICIENT DE RÉPARTITION EAU / HUILE	Not Applicable

SECTION IV – FIRE AND EXPLOSION HAZARD OF MATERIAL/RISQUES D'INCENDIE ET D'EXPLOSION DU MATÉRIEL

FLAMMABILITY / INFLAMMABILITÉ __ YES / OUI <u>X</u> NO/NON IF YES, UNDER WHICH CONDITIONS? / SI OUI, DANS QUELLES CONDITIONS?	
MEANS OF EXTINCTION / MOYENS D'EXTINCTION	Not Applicable
SPECIAL PROCEDURES / MARCHE A SUIVRE SPÉCIALE	Product by itself is non-flammable. There is, however, a latent fire or explosion hazard when in contact with metals due to generation of hydrogen gas. Fire-Fighting equipment: Pressure Demand self-Contained respiratory equipment.
FLASHPOINT [°C] AND METHOD / POINT D'ÉCLAIR [°C] ET MÉTHODE DE DÉTERMINATION	Not Applicable
UPPER EXPLOSION LIMIT [% BY VOLUME]/ SEUIL MAXIMAL D'INFLAMMABILITÉ [% PAR VOLUME]	Not Applicable

MATERIAL NAME / IDENTIFIÉRIER - NOM / IDENTIFICATION DE LA MATIÉRE ↓**G-50 Toilet Bowl Cleaner**

LD 50 OF MATERIAL [SPECIFY SPECIES & ROUTE] / LD50 DE LA MATIÉRE [PRÉCISER L'ESPECE ET LA VOIE D'ADMINISTRATION]	Not Applicable
LC50 OF MATERIAL [SPECIFY SPECIES & ROUTE] / LC50 DE LA MATIÉRE / [PRÉCISER L'ESPECE ET LA VOIE D'ADMINISTRATION]	Not Applicable
EXPOSURE [LIMITS] / LIMITS D'EXPOSITION	Short Term Inhalation Limits: 5 PPM for 5 min. IDLH Value: 100 PPM
IRRITANCY OF MATERIAL / PROPRIÉTÉ IRRITANTE DE LA MATIÉRE	Eyes, Skin, Respiratory Tract
SENSITIZATION OF MATERIAL / SENSIBILISATION A LA MATIÉRE	Eyes, Skin
SYNERGISTIC MATERIALS / MATÉRES SYNERGIQUES	None Known
CARCINOGENICITY, REPRODUCTIVE EFFECTS, TERATOGENICITY, MUTAGENICITY / CANCÉROGÉNÉCITÉ, EFFETS NOCIFS SUR LA REPRODUCTION, TÉRATOGÉNÉCITÉ, MUTAGÉNÉCITÉ	Not regulated as carcinogen

SECTION VII – PREVENTIVES MEASURES / MESURES PRÉVENTIVES**PERSONAL PROTECTIVE EQUIPMENT / MATÉRIEL PERSONNEL DE PROTECTION**

GLOVES (SPECIFY) / GANTS [PRÉCISER]	Impervious
EYE [SPECIFY] / YEUX [PRÉCISER]	Glasses, goggles
RESPIRATORY (SPECIFY) / APPAREIL RESPIRATOIRE (PRÉCISÉR)	NIOSH approved respiratory protection required in absence of proper environmental control. For emergencies, a self-contained breathing apparatus or a full-face respirator as approved by NIOSH is recommended.
OTHER (SPECIFY) / AUTRES (PRCISER)	Full protective suit is recommended where there is a chance product could come in contact with clothing.
ENGINEERING CONTROLS [E.G. VENTILATION, ENCLOSED PROCESS, SPECIFY] / MÉCANISMES TECHNIQUES [EX. VENTILATION, OPÉRATION EN MILIEU FERMÉ, PRÉCISER]	Control Vapor to 5 PPM or less at all times
LEAK AND SPILL PROCEDURE / MESURES EN CAS DE FUITE OU DE DÉVERSEMENT	Small quantities may be flushed with copious quantities of water: in case of larger amounts, contain liquid. Use limestone, lime, or soda ash, to cautiously neutralize.
WASTE DISPOSAL / ÉLIMINATION DES RÉSIDUS	Large amounts neutralize first prior to discharging material to the sewer system.
HANDLING PROCEDURES AND EQUIPMENTS / MÉTHODES ET ÉQUIPEMENT POUR LA MANUTENTION	Prevent all contact with skin and eyes. Avoid breathing irritating vapors.
STORAGE REQUIREMENTS / EXIGENCES D'ENTREPOSAGE	Store in closed containers, away from children.
SPECIAL SHIPPING INFORMATION / RENSEIGNEMENTS SPÉCIAUX POUR L'EXPÉDITION	Hydrochloric acid solution, Class 8, Pin #1789

SECTION VIII – FIRST AID MEASURES / PREMIERS SOINS

EYES: Immediate and continuous irrigation with flowing water at least 30 minutes is imperative. Prompt medical consultation essential.

SKIN: Skin burn likely. Immediate, continuous, and thorough washing with mild soap and water for 15 minutes is required. Remove contaminated clothing immediately.

INHALATION: Remove to fresh air if effects occur. Call a physician and/or transport to medical facility.

INGESTION: Corrosive do not induce vomiting. Give large amounts of water or milk and transport to medical facility.

ADDITIONAL INFORMATION / RENSEIGNEMENTS SUPPLÉMENTAIRES	
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SECTION IX – PREPARATION DATE OF M.S.D.S. / FICHE SIGNALÉTIQUE

PREPARED BY: Gus Kaklamanos - CHEMIST

TELEPHONE NO.: (416) 2617182

DATE: January 01, 2010

ADDITIONAL NOTES OR REFERENCES / NOTES ADDITIONNELLES OU RÉFÉRENCES:

NOTE TO PHYSICIAN: Eyes – May cause severe corneal injury or burn. May cause impairment of vision. Stain or evidence of corneal injury. If cornea is burned, instill antibiotic steroid preparation.

FIRST AID:

Eyes – Frequently consult ophthalmologist.

Skin – May cause severe burn. If burn is present, treat as any thermal burn.

Respiratory – Vapors may cause severe irritation and necrosis of respiratory tract tissues. May cause pulmonary damage.
Administer oxygen if available.

Oral – If lavage is performed, suggest endotracheal and/or esophogoscopic control.

Notes: Some of the information provided in this H.S.D.S. may refer to large or special usage of the product. The basic intended 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.

WHMIS CLASSIFICATION: CLASS D, DIV. 2A AND 2B
CLASS E