



G.K. Chemical Specialties Co. Ltd.
90 Barbados Blvd.
Scarborough, Ontario M1J 1K9
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Material SAFETY DATA SHEET

PRODUCT NAME: Professional Drain Opener

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:	MODERATE HAZARD – materials which in themselves are normally unstable and will readily undergo violent chemical change, but will not detonate. These materials may also react violently with water.
PERSONAL PROTECTION:	Safety glasses + gloves
HAZARD ALERT SIGN:	HEALTH HAZARD – Deadly FIRE HAZARD – Will not burn REACTIVITY – Violent chemical change SPECIFIC HAZARD – Corrosive

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

MATERIAL NAME / IDENTIFIÉRIER – NOM / IDENTIFICATION DE LA MATIÈRE

Professional Drain Opener

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	Sulfuric Acid
CHEMICAL FAMILY / FAMILLE CHIMIQUE	Acid
CHEMICAL FORMULA / FORMULE CHIMIQUE	H ₂ SO ₄
TRADE NAME AND SYNONYMS / APPELLATION COMMERCIALE ET SYNONYMES	Oil of Vitriol, Hydrogen Sulfate
MOLECULAR WEIGHT / POIDS MOLÉCULAIRE	Not Pertinent
MATERIAL USE / UTILISATION DE LA MATIÈRE	Clean or open drains

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}
Sulfuric Acid	96%	7664-93-9		
Water, Inert	Balance			
			Permissible exposure limits in air: ACGIH TWA = /mg/m ³ The IDLH level is 80 mg/m ³	

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

PHYSICAL STATE / ÉTAT PHYSIQUE	Liquid
ODOUR AND APPEARANCE / ODEUR ET APPARENCE	Odourless, colourless oily liquid
ODOUR THRESHOLD (P.P.M.) / SEUIL DE L'ODEUR (PPM)	Not Pertinent
SPECIFIC GRAVITY / DENSITÉ RELATIVE	1.84 gm/cm ³
VAPOUR PRESSURE [MM] / TENSION DE VAPEUR [MM]	1 at 146 °C
VAPOUR DENSITY [AIRE = 1] / DENSITÉ DE VAPEUR [AIR =1]	Not Applicable
EVAPORATION RATE / TAUX D'ÉVAPORATION	Not Applicable
BOILING POINT [°C] / POINT D'ÉBULLITION [°C]	At 1 Atm. 100 °C
FREEZING POINT [°C] / POINT DE CONGÉLATION [°C]	Not Pertinent
SOLUBILITY IN WATER [20°C] / SOLUBILITÉ DANS L'EAU [20°C]	Soluble
% VOLATILE [BY VOLUME] / % VOLATILITÉ [PAR VOLUME]	4%
PH	1 ± 0.4
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 <input type="checkbox"/> YES / OUI <input checked="" type="checkbox"/> NO/NON IF YES, UNDER WHICH CONDITIONS? / SI OUI, DANS QUELLES CONDIONS?	
MEANS OF EXTINCTION / MOYENS D'EXTINCTION	Not Applicable
SPECIAL PROCEDURES / MARCHE A SUIVRE SPÉCIALE	Sulfuric acid mist, SO ₃ or SO ₂ gases can be released at high temperatures; firefighters should wear acid resistant suits and pressure demand self-contained breathing apparatus for respiratory and eye protection.
FLASHPOINT [°C] AND METHOD / POINT D'ÉCLAIR [°C] ET MÉTHODE DE DÉTERMINATION	Not Flammable
UPPER EXPLOSION LIMIT [% BY VOLUME]/ SEUIL MAXIMAL D'INFLAMMABILITÉ [% PAR VOLUME]	Not Applicable

LOWER EXPLOSION LIMIT [% BY VOLUME]/ SEUIL MINIMAL D'INFLAMMABILITÉ [% PAR VOLUME]	Not Applicable
AUTOIGNITION TEMPERATURE [°C]/ TEMPÉRATURE D'AUTO-INFLAMMATION [°C]	Not Applicable
HAZARDOUS COMBUSTION PRODUCTS / PRODUITS DE COMBUSTION DANGEREUX	Not Applicable

EXPLOSION DATA / DONNÉES SUR L'EXPLOSIBILITÉ

SENSITIVITY TO MECHANICAL IMPACT / SENSIBILITÉ AUX CHOCS	Not Applicable
SENSITIVITY TO STATIC DISCHARGE / SENSIBILITÉ AUX DÉCHARGES ÉLECTROSTATIQUES	Not Applicable

SECTION V – REACTIVITY DATA / DONNÉES SUR LA RÉACTIVITÉ

CHEMICAL STABILITY / STABILITÉ CHIMIQUE <u>X</u> YES / OUI NO/NON IF NO, UNDER WHICH CONDITIONS? / SI NON-, DANS QUELLES CONDISIONS?	
INCOMPATIBILITY TO OTHER SUBSTANCES / INCOMPATIBILITÉ AVEC D'AUTRES SUBSTANCES <u>X</u> YES / OUI NO/NON IF SO, WHICH ONES? / SI OUI, AVEC LESQUELLES?	Combustible materials, wood, oil, caustic ammonia, alcohols, aromatic amines, amides, aliphatic amines, organic anhydrides. Not dangerously reactive.
REACTIVITY AND UNDER WHAT CONDITIONS / RÉACTIVITÉ – DANS QUELLES CONDITIONS?	Diluted sulfuric acid may react with metals and produce flammable hydrogen gas: when reacts with sulfides, produces toxic hydrogen sulfide.
HAZARDOUS DECOMPOSITION PRODUCTS / PRODUITS DE DÉCOMPOSITION DANGEREUX	Sulfuric acid, when in contact with metals, may liberate flammable hydrogen gas.

SECTION VI – TOXICOLOGICAL PROPERTIES OF MATERIAL / PROPRIÉTÉS TOXICOLOGIQUES DE LA MATIÈRE

ROUTE OF ENTRY / VOIE D'ADMINISTRATION	
<u>X</u> SKIN CONTACT / CONTACT AVEC LA PEAU	<u> </u> SKIN ABSORPTION / ABSORPTION PAR LA PEAU
<u>X</u> EYE CONTACT / CONTACT OCULAIRE	<u>X</u> INHALATION ACUTE / INHALATION AIGUE
<u> </u> INHALATION CHRONIC / INHALATION CHRONIQUE	<u>X</u> INGESTION
EFFECTS OF ACUTE EXPOSURE TO MATERIAL / EFFETS DE L'EXPOSITION AIGUE A LA MATIERE	INHALATION: Inhalation of acid mist may cause irritation or corrosive burns to nose, mouth, throat and mucous membranes; dental erosion may occur; pulmonary edema is possible. EYES: May cause conjunctivitis or severe burn; permanent damage may occur. SKIN: Is highly corrosive; will cause burn and scarring. INGESTION: Will cause corrosive burn to mouth, throat, stomach; may be fatal if swallowed.
EFFECTS OF CHRONIC EXPOSURE TO MATERIAL / EFFETS DE L'EXPOSITION CHRONIQUE A LA MATIERE	Sulfuric acid does not have chronic health effects.

MATERIAL NAME / IDENTIFIÉRIER - NOM / IDENTIFICATION DE LA MATIÉRE ↓**Professional Drain Opener**

LD 50 OF MATERIAL [SPECIFY SPECIES & ROUTE] / LD50 DE LA MATIÉRE [PRÉCISER L'ESPECE ET LA VOIE D'ADMINISTRATION]	
LC50 OF MATERIAL [SPECIFY SPECIES & ROUTE] LC50 DE LA MATIÉRE / [PRÉCISER L'ESPECE ET LA VOIE D'ADMINISTRATION]	Not Established
EXPOSURE [LIMITS] / LIMITS D'EXPOSITION	TLV: 1 mg/m ³ short term inhalation limits: 10 mg/m ³ for 5 minutes
IRRITANCY OF MATERIAL/PROPRIÉTÉ IRRITANTE DE LA MATIÉRE	Causes severe second and third degree burns of skin.
SENSITIZATION OF MATERIAL / SENSIBILISATION A LA MATIÉRE	Skin, Eyes 5 mg/m ³ for 10 minutes
SYNERGISTIC MATERIALS / MATÉRES SYNERGIQUES	Not Established
CARCINOGENICITY, REPRODUCTIVE EFFECTS, TERATOGENICITY, MUTAGENICITY / CANCÉROGÉNÉCITÉ, EFFETS NOCIFS SUR LA REPRODUCTION, TÉRATOGÉNÉCITÉ, MUTAGÉNÉCITÉ	Not regulated as carcinogen. Late Toxicity: None Vapors from hot acid cause moderate irritation of eyes and respiratory system. Effect is temporary.

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

GLOVES (SPECIFY) GANTS [PRÉCISER]	Wear rubber or acid resistant gloves
EYE [SPECIFY] / YEUX [PRÉCISER]	Goggles, Glasses or Full Face Shield
RESPIRATORY (SPECIFY) / APPAREIL RESPIRATOIRE (PRÉCISÉR)	Wear appropriate NIOSH-MSHA approved respirators whenever workplace contamination exceeds applicable limits.
OTHER (SPECIFY) / AUTRES (PRCISER)	Acid resistant clothing such as rubber aprons, coats, pants, boots and helmets.
ENGINEERING CONTROLS [E.G. VENTILATION, ENCLOSED PROCESS, SPECIFY] / MÉCANISMES TECHNIQUES [EX. VENTILATION, OPÉRATION EN MILIEU FERMÉ, PRÉCISER]	General Ventilation, or local for hot solution
LEAK AND SPILL PROCEDURE / MESURES EN CAS DE FUITE OU DE DÉVERSEMENT	Consider evacuation of all but emergency personnel; do not touch material; ventilate area; contain spill with sand or earth; clean up, neutralize with a base. ENVIRONMENTAL EFFECTS: Will burn vegetation on the spill area: Large quantities in a warm stream will interfere with aquatic life.
WASTE DISPOSAL / ÉLIMINATION DES RÉSIDUS	Recycle if possible or dispose according to applicable regulations. To protect freshwater aquatic life neutralize to PH 6.5 – 9.0 To protect saltwater aquatic life PH 6.5 – 8.5 to neutralize add slowly solution of soda ash or caustic with stirring: Flush to drain with large quantities of water.
HANDLING PROCEDURES AND EQUIPMENTS / MÉTHODES ET ÉQUIPEMENT POUR LA MANUTENTION	Handle with care. Keep away of skin, eyes, clothing.
STORAGE REQUIREMENTS / EXIGENCES D'ENTREPOSAGE	This product should be stored in areas with acid resistant floors. Store in closed containers away from children and combustible chemicals.
SPECIAL SHIPPING INFORMATION / RENSEIGNEMENTS SPÉCIAUX POUR L'EXPÉDITION	Mark As: Sulfuric Acid, more than 51%, Pin #1830, Class 8(9.2)

SECTION VIII – FIRST AID MEASURES / PREMIERS SOINS

INHALATION: Remove to fresh air. If not breathing give artificial respiration; oxygen may be required; keep warm and quiet; get medical help.

EYES: Flush eyes and under eyelids with water for a least 15 minutes; and seek medical help.

SKIN: Remove contaminated clothing immediately under shower if possible. Flush with water for 15 minutes and get medical help.

INGESTION: Seek medical help immediately: Drink lots of water; do not induce vomiting, but if patient vomits give him more water.

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:

REACTIVITY WITH WATER: Reacts violently with evolution of heat. Spattering occurs when water is added to the compound.

Always add this compound to the water slowly. Wear gloves and glasses in case it will splash back. If clothing comes in contact remove immediately.

WHMIS CLASSIFICATION: CLASS D, 2B
CLASS E
CLASS F