

G.K. Chemical Specialties Co. Inc. 90 Barbados Blvd.

Scarborough, Ontario M1J 1K9 Tel: (416) 261-7182 Fax: (416) 261-5663

# 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	

### $\textbf{SECTION} \ \textbf{I} - \textbf{material identification and use} \, / \, \textbf{identification de la matière et usage}$

MATERIAL NAME / IDENTIFIER – NOM / IDENTIFICATION DE LA MATIÉRE		
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. Inc. 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	H2SO4	
TRADE NAME AND SYNONYMS / APPELLATION COMMERCIALE ET SYNONYMES	Oil of Vitriol, Hydrogen Sulfate	
MOLECULAR WEIGHT / POIDS MOLÉCULAIRE	Not Pertinent	
MATERIAL USE / UTILISATION DE LA MATIÉRE	Clean or open drains	

- G.K. Chemical Specialties Co. Inc. 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. 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 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. 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.

<u>INGREDIENTS</u>. 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.

- <u>T.L.V.</u> (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.
- <u>"C.A.S REG. No."</u> means the identification number assigned to a chemical substance by the Chemical Abstracts Service Division of the American Chemical Society.
- <u>"LC 50"</u> 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.

<u>FLASH POINT.</u> 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 MATIÉRE				
HAZARDOUS INGREDIENTS / INGREDIENTS 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 li TWA = /mg/m <sup>3</sup> The IDLH level is 80 m	

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

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 / DENSITE RELATIVE	1.84 gm/cm <sup>3</sup>
VAPOUR PRESSURE [MM] / TENSION DE VAPEUR [MM]	1 at 146 °C
VAPOUR DENSITY [AIRE = 1] / DENSITE 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 CONGELATION [°C]	Not Pertinent
SOLUBILITY IN WATER [20°C] / SOLUBILITÉ DANS L'EAU [20°C]	Soluble
% VOLATILE [BY VOLUME] / % VOLATILITÉ [PAR VOLUME]	4%
PH	1 <u>+</u> 0.4
COEFFCIENT 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 _X_ NO/NON IF YES, UNDER WHICH CONDITIONS? / SI OUI, DANS QUELLES CONDISIONS?	
MEANS OF EXTINCTION / MOYENS D'EXTINCTION	Not Applicable
SPECIAL PROCEDURES / MARCHE A SUIVRE SPÉCIALE	Sulfuric acid mist, SO3 or SO2 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		Not Applicable	
D'INFLAMMABILITÉ [% PAR VOLUME]			
AUTOIGNITION TEMPERATURE [°C] / TEMPÉRATURE D'AUTO-		Not Applicable	
INFLAMMATION [°C]			
HAZARDOUS COMBUSTION PRO	DUCTS / PRODUITS DE		Not Applicable
COMBUSTION DANGEREUX			
EXPLOSION DATA / DO	NNÉEC CHD I ÆVDI (	CID	II ITÉ
SENSITIVITY TO MECHANICAL			Applicable
AUX CHOCS	INIT TO I / SEL (SIDIEITE	NOU	Applicable
SENSITIVITY TO STATIC DISCHARGE / SENSIBILITÉ AUX Not Applicable			Applicable
DÉCHARGES ÉLECTROSTATIQU	UES	1101	Application
			-
CE CELON II			
SECTION V - REACTIVE			A RÉACTIVITÉ
CHEMICAL STABILITY / STABIL	ITE CHIMIQUE <u>X</u> YES/O	UI	
NO/NON			
IF NO, UNDER WHICH CONDITIONS CONDISIONS?	ONS? / SI NON-, DANS QUELL	LES	
INCOMPATIBILITY TO OTHER S INCOMPATIBILITÉ AVEC D'AUT		,	Combustible materials, wood, oil, caustic ammonia, alcohols,
OUI		_	aromatic amines, amides, aliphatic amines, organic
NO/NON	ECTECOLELLES		anhydrides. Not dangerously reactive.
IF SO, WHICH ONES? / SI OUI, AV			
REACTIVITY AND UNDER WHAT	T CONDITIONS / RÉACTIVIT	É –	Diluted sulfuric acid may react with metals and produce
DANS QUELLES CONDITIONS?		flammable hydrogen gas: when reacts with sulfides, produces	
HAZARDOUS DECOMPOSITION PRODUCTS / PRODUITS DE		toxic hydrogen sulfide.  Sulfuric acid, when in contact with metals, may liberate	
DÉCOMPOSITION DANGEREUX		flammable hydrogen gas.	
CECTION VI TOTAL			
SECTION VI -TOXICOLO MATIÉRE	OGICAL PROPERTIES OF	MAI	TERIAL / PROPRIÉTÉS TOXICOLOGIQUES DE LA
ROUTE OF ENTRY / VOIE D'ADM	IINISTRATION		
V SKIN CONTACT / CONTACT	AVECTA DEAT		SKIN ABSORPTION / ABSORPTION PAR LA PEAU
X SKIN CONTACT / CONTACT AVEC LA PEAU			_
X EYE CONTACT / CONTACT	OCULAIRE		X INHALATION ACUTE / INHALATION AIGUE
_ INHALATION CHRONIC / INHALATION CHRONIQUE X INGESTION			
EFFECTS OF ACUTE	INHALATION: Inhalation	on of	acid mist may cause irritation or corrosive burns to nose,
EXPOSURE TO MATERIAL / EFFETS DE L'EXPOSITION	mouth, throat and mucous membranes; dental erosion may occur; pulmonary edema is		
AIGUE A LA MATIERE	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.		osive duffi to mouth, throat, stomach; may be fatal if
	Swanowed.		
EFFECTS OF CHRONIC	Sulfuric acid does not ha	ive ch	pronic health effects.
EXPOSURE TO MATERIAL / EFFETS DE L'EXPOSITION			
CHRONIQUE A LA MATIERE			

# MATERIAL NAME / IDENTIFIER - NOM / IDENTIFICATION DE LA MATIÉRE LA Professional Drain Opener

Professional Drain Opener		
LD 50 OF MATERIAL [SPECIFY SPECIES & ROUTE] / LD50 DE L MATIÉRE [PRECISER L'ESPECE ET LA VOIE D'ADMINISTRAT		
LC50 OF MATERIAL [SPECIFY SPECIES & ROUTE] LC50 DE LA MATIÉRE / [PRECISER L'ESPECE ET LA VOIE D'ADMINISTRA'		
EXPOSURE [LIMITS] / LIMITS D'EXPOSITION	TLV: 1 mg/m³ short term inhalation limits: 10 mg/m³ for 5 minutes	
IRRITANCY OF MATERIAL/PROPRIÉTÉ IRRITANTE DE LA MA		
SENSITIZATION OF MATERIAL / SENSIBILISATION A LA MAT	<b>ÉRE</b> Skin, Eyes 5 mg/m³ for 10 minutes	
SYNERGISTIC MATERIALS / MATÉRES SYNERGIQUES	Not Established	
CARCINOGENICITY, REPRODUCTIVE EFFECTS, TERATOGENI MUTAGENCITY / CANCÉROGÉNICITÉ, EFFETS NOCIFS SUR LA REPRODUCTION, TÉRATOGÉNÉCITÉ, MUTAGÉNICITÉ	Late Toxicity: None Vapors from hot acid cause moderate irritation of eyes and respiratory system.  Effect is temporary.	
SECTION VII - PREVENTIVES MEASURES / MESU		
PERSONAL PROTECTIVE EQUIPMENT / MAT		
	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 wir 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

#### SECTION IX - PREPARATION DATE OF M.S.D.S. / FICHE SIGNALÉTIQUE

PREPARED BY: Gus Kaklamanos - CHEMIST

TELEPHONE NO.: (416) 261 7182

DATE: January 5, 2015

#### ADDITIONAL NOTES OR REFERENCES / NOTES ADDITIONNELLES OU RÉFÉRENCES:

RECTIVITY 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