



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: D-LIME All Purpose Deliming Solution (Concentrate)

HEALTH HAZARD RATING:	MODERATE HAZARD – temporary or minor injury may occur
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
HAZARD ALERT SIGN:	HEALTH HAZARD – Hazardous FIRE HAZARD – Will not burn REACTIVITY – Stable SPECIFIC HAZARD – Acid

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

MATERIAL NAME / IDENTIFIER – NOM / IDENTIFICATION DE LA MATIÈRE

D-LIME All Purpose

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	Not Applicable
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

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.

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}
Phosphoric Acid	15-40	7664-38-2	50-500 mg/kgm	
Ethylene Glycol Monobutyl Ether	3-7	111-76-2	500-5000 mg/kgm (Rat)	
Non-Ionic Surfactant	1-5	Non hazardous	Toxicity by ingestion	
Ester Type Surfactant	1-5	Non hazardous		
Perfume	< 0.6	Non hazardous		< = Less Than
Water	Balance	Non hazardous		
Threshold limit value for Phosphoric Acid = 1.0 mg/m ³				
Threshold limit value for Ethylene Glycol Monobutyl Ether = 25 PPM				

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

PHYSICAL STATE / ÉTAT PHYSIQUE	Liquid
ODOUR AND APPEARANCE / ODEUR ET APPARENCE	Clear Green Liquid, Pleasant Odour
ODOUR THRESHOLD (P.P.M.) / SEUIL DE L'ODEUR (PPM)	Not Applicable
SPECIFIC GRAVITY / DENSITE RELATIVE	1.1 ± 0.5 gm/cm ³
VAPOUR PRESSURE [MM] / TENSION DE VAPEUR [MM]	< 25 at 20 °C
VAPOUR DENSITY [AIRE = 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]	68 ± 1%
PH	Conc. 1.25 ± 0.5 2% sol'n 1.75 ± 0.5
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 _X_ 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	Not Applicable

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
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	At high temperatures may produce toxic gas

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 ☒ YES / OUI ☐ NO/NON IF NO, UNDER WHICH CONDITIONS? / SI NON, DANS QUELLES CONDISIONS?	
INCOMPATIBILITY TO OTHER SUBSTANCES / INCOMPATIBILITÉ AVEC D'AUTRES SUBSTANCES ☒ YES / OUI ☐ NO/NON IF SO, WHICH ONES? / SI OUI, AVEC LESQUELLES?	Bases, sulphuric acid, metals contact with metals may cause generation of explosive or flammable hydrogen gas.
REACTIVITY AND UNDER WHAT CONDITIONS / RÉACTIVITÉ – DANS QUELLES CONDITIONS?	Not dangerously reactive with bases
HAZARDOUS DECOMPOSITION PRODUCTS / PRODUITS DE DÉCOMPOSITION DANGEREUX	Not pertinent

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

ROUTE OF ENTRY / VOIE D'ADMINISTRATION

☒ SKIN CONTACT / CONTACT AVEC LA PEAU ☐ SKIN ABSORPTION / ABSORPTION PAR LA PEAU
☒ EYE CONTACT / CONTACT OCULAIRE ☒ INHALATION ACUTE / INHALATION AIGUE
☐ INHALATION CHRONIC / INHALATION CHRONIQUE ☒ INGESTION

EFFECTS OF ACUTE EXPOSURE TO MATERIAL / EFFETS DE L'EXPOSITION AIGUE A LA MATIERE	SKIN CONTACT: Will cause moderate irritation to skin upon contact after a few minutes. EYE CONTACT: Will cause moderate irritation upon contact. INHALATION: Will cause moderate irritation of upper respiratory tract, lungs. INGESTION: Burns on mouth, sour acrid taste, gastrointestinal irritation, nausea, vomiting, bloody diarrhea, severe abdominal pains, difficult breathing, shock, and death.
EFFECTS OF CHRONIC EXPOSURE TO MATERIAL / EFFETS DE L'EXPOSITION CHRONIQUE A LA MATIERE	None

MATERIAL NAME / IDENTIFIER - NOM / IDENTIFICATION DE LA MATIÈRE↓**D-LIME All Purpose (Concentrate)**

LD 50 OF MATERIAL [SPECIFY SPECIES & ROUTE] / LD50 DE LA MATIÈRE [PRÉCISER L'ESPECE ET LA VOIE D'ADMINISTRATION]	Oral Toxicity Rat 1500 mg/kgm
LC50 OF MATERIAL [SPECIFY SPECIES & ROUTE] LC50 DE LA MATIÈRE / [PRÉCISER L'ESPECE ET LA VOIE D'ADMINISTRATION]	Not Available
EXPOSURE [LIMITS] / LIMITS D'EXPOSITION	3.5 mg/m ³
IRRITANCY OF MATERIAL/PROPRIÉTÉ IRRITANTE DE LA MATIÈRE	Eyes, Skin
SENSITIZATION OF MATERIAL / SENSIBILISATION A LA MATIÈRE	Skin, Eyes
SYNERGISTIC MATERIALS / MATÉRES SYNERGIQUES	None Known
CARCINOGENICITY, REPRODUCTIVE EFFECTS, TERATOGENICITY, MUTAGENCY / 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 is required in absence of proper environmental control, whenever application may create mist.
OTHER (SPECIFY) / AUTRES (PRCISER)	Full protective suit is recommended where there is a chance product could come in contact with clothing.
ENGINEERING CONTYROLS [E.G. VENTILATION, ENCLOSED PROCESS, SPECIFY] / MÉCANISMES TECHNIQUES [EX. VENTILATION, OPÉRATION EN MILIEU FERMÉ, PRÉCISER]	General Ventilation
LEAK AND SPILL PROCEDURE / MESURES EN CAS DE FUITE OU DE DÉVERSEMENT	Small quantities may be flushed with copious amounts of water; in case of large amounts, contain liquid. Use limestone, lime or soda ash, to cautiously neutralize. Phosphoric acid is dangerous to aquatic life in high concentrations.
WASTE DISPOSAL / ÉLIMINATION DES RÉSIDUS	Sanitary sewer Large amounts neutralize first.
HANDLING PROCEDURES AND EQUIPMENTS / MÉTHODES ET ÉQUIPEMENT POUR LA MANUTENTION	Avoid contact with eyes and skin.
STORAGE REQUIREMENTS / EXIGENCES D'ENTREPOSAGE	Store in closed containers away from children
SPECIAL SHIPPING INFORMATION / RENSEIGNEMENTS SPÉCIAUX POUR L'EXPÉDITION	Phosphoric acid solution, Class 8, Pin #1805, Pkg III

SECTION VIII – FIRST AID MEASURES / PREMIERS SOINS

EYES: Immediate and continuous irrigation with flowing water at least 15 minutes is imperative. Prompt medical consultation essential.

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

INHALATION: Remove for 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 a medical facility. Never give anything by mouth to an unconscious person.

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 5, 2015

ADDITIONAL NOTES OR REFERENCES / NOTES ADDITIONNELLES OU RÉFÉRENCES:

Wear appropriate clothing to prevent any possibility of skin contact with liquids of > 10% content of this product, or repeated or prolonged contact with liquid containing > 5% content of this product.

WHMIS CLASSIFICATION: Class E
Class D, 2B