



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: Methanol or Methyl Hydrate or Methyl Alcohol

HEALTH HAZARD RATING:	SLIGHT HAZARD – irritation or minor reversible injury possible
FLAMMABILITY HAZARD RATING:	SERIOUS HAZARD – materials capable of ignition under almost all normal temperature conditions. Including flammable liquids with flash points below 73°F and boiling points above 100°F as well as liquids with flash points between 73°F and 100°F (NFPA Class IB and Class IC)
REACTIVITY HAZARD RATING:	MINIMAL HAZARD – materials, which are normally stable, even under fire conditions, and which will not react with water.
PERSONAL PROTECTION:	Splash goggles + gloves + syntactic apron + vapor respirator
HAZARD ALERT SIGN:	HEALTH HAZARD — Slightly hazardous FIRE HAZARD – Below 100°F REACTIVITY – Stable SPECIFIC HAZARD –

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

MATERIAL NAME / IDENTIFIÉ – NOM / IDENTIFICATION DE LA MATIÈRE

Methanol or Methyl Hydrate or Methyl Alcohol

MANUFACTURER'S NAME AND ADDRESS/ NOM DU FABRICANT – ADRESSE EMERGENCY PHONE NO. / N° DE TÉLÉPHONE D'URGENCE	
SUPPLIER'S NAME AND ADDRESS/ NOM DU FOURNISSEUR - ADRESSE EMERGENCY PHONE NO. / N° DE TELEPHONE DURGENCE	G.K. Chemical Specialties Co. Inc. 90 Barbados Blvd. Scarborough, Ontario M1J 1K9 (416) 261-7182 / 905 427-7605
CHEMICAL NAME / DÉNOMINATION CHIMIQUE	Not Applicable
CHEMICAL FAMILY / FAMILLE CHIMIQUE	
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}
Methyl Alcohol (Methanol, Methyl Hydrate)	100%	67-56-1	LD50 Oral 5600- LD 50 Skin 16000 mg/kgm TLV 200 PPM LC50 ppm Inhalation 64,000	< = Less Than

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

PHYSICAL STATE / ÉTAT PHYSIQUE	Liquid
ODOUR AND APPEARANCE / ODEUR ET APPARENCE	Clear, colourless, liquid with faint, sharp odour
ODOUR THRESHOLD (P.P.M.) / SEUIL DE L'ODEUR (PPM)	50-100 ppm
SPECIFIC GRAVITY / DENSITE RELATIVE	0.7925 (20°)
VAPOUR PRESSURE [MM] / TENSION DE VAPEUR [MM]	92 mm Hg (20°C0)
VAPOUR DENSITY [AIRE = 1] / DENSITE DE VAPEUR [AIR =1]	1.1
EVAPORATION RATE / TAUX D'ÉVAPORATION	Faster than Water
BOILING POINT [°C] / POINT D'ÉBULLITION [°C]	64.6 °C
FREEZING POINT [°C] / POINT DE CONGELATION [°C]	-98 °C
SOLUBILITY IN WATER [20°C] / SOLUBILITÉ DANS L'EAU [20°C]	Complete
% VOLATILE [BY VOLUME] / % VOLATILITÉ [PAR VOLUME]	100%
PH	Not Applicable
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 checked="" type="checkbox"/> YES / OUI <input type="checkbox"/> NO/NON IF YES, UNDER WHICH CONDITIONS? / SI OUI, DANS QUELLES CONDIONS?	WARNING: Methyl Alcohol burns with a barely visible pale. Blue Flame!
MEANS OF EXTINCTION / MOYENS D'EXTINCTION	Foam, dry chemical, water fog, water spray only to cool, product floats on water – water jet spreads flames: firefighters must wear SCBA.
SPECIAL PROCEDURES / MARCHE A SUIVRE SPÉCIALE	None Required
FLASHPOINT [°C] AND METHOD / POINT D'ÉCLAIR [°C] ET MÉTHODE DE DÉTERMINATION	12°C
UPPER EXPLOSION LIMIT [% BY VOLUME]/ SEUIL MAXIMAL D'INFLAMMABILITÉ [% PAR VOLUME]	36.5
LOWER EXPLOSION LIMIT [% BY VOLUME]/ SEUIL MINIMAL D'INFLAMMABILITÉ [% PAR VOLUME]	6.0

AUTOIGNITION TEMPERATURE [°C] / TEMPÉRATURE D'AUTO-INFLAMMATION [°C]	465°C
HAZARDOUS COMBUSTION PRODUCTS / PRODUITS DE COMBUSTION DANGEREUX	Carbon monoxide, nitrogen oxides, formaldehyde, smoke

EXPLOSION DATA / DONNÉES SUR L'EXPLOSIBILITÉ

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

SECTION V – REACTIVITY DATA / DONNÉES SUR LA RÉACTIVITÉ

CHEMICAL STABILITY / STABILITÉ CHIMIQUE <input checked="" type="checkbox"/> YES / OUI <input type="checkbox"/> NO/NON IF NO, UNDER WHICH CONDITIONS? / SI NON-, DANS QUELLES CONDITIONS?	Stable, will not polymerize
INCOMPATIBILITY TO OTHER SUBSTANCES / INCOMPATIBILITÉ AVEC D'AUTRES SUBSTANCES <input type="checkbox"/> YES / OUI <input checked="" type="checkbox"/> NO/NON IF SO, WHICH ONES? / SI OUI, AVEC LESQUELLES?	
REACTIVITY AND UNDER WHAT CONDITIONS / RÉACTIVITÉ – DANS QUELLES CONDITIONS?	Strong oxidizing agents
HAZARDOUS DECOMPOSITION PRODUCTS / PRODUITS DE DÉCOMPOSITION DANGEREUX	None apart from “Hazardous Combustion Products”

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 MATIÈRE	EYE CONTACT: Irritation and burning sensation; permanent damage unlikely SKIN CONTACT: defatting, drying, may irritate SKIN ABSORPTION: yes; no toxic effects anticipated by this route INHALATION: Irritation vapour; headache, dizziness, drowsiness, intoxication, blurred vision INGESTION: headache, dizziness, drowsiness, intoxication, temporary blurring of vision, and collapse WARNING: - ingestion of methyl alcohol can cause death - sublethal doses of methyl alcohol may cause blindness, but, - effects may take 3-4 days to become apparent. Treatment should begin immediately!
EFFECTS OF CHRONIC EXPOSURE TO MATERIAL / EFFETS DE L'EXPOSITION CHRONIQUE A LA MATIÈRE	General – repeated inhalation or ingestion may cause liver damage and progressive deterioration of eyesight - repeated exposure may cause skin cracking and dermatitis WARNING: Methanol is eliminated from the body slowly and accumulates with repeated absorption. If toxic effects are seen or even suspected, the victim should have no further exposure, even below the TWAEV, for one week

MATERIAL NAME / IDENTIFIÉRIER - NOM / IDENTIFICATION DE LA MATIÉRE↓**Methanol or Methyl Hydrate or Methyl Alcohol**

LD 50 OF MATERIAL [SPECIFY SPECIES & ROUTE]/LD50 DE LA MATIÉRE [PRÉCISER L'ESPECE ET LA VOIE D'ADMINISTRATION]	5600 mg/kgm (oral, rat); 16,000 mgj/kg (skin, rabbit)
LC50 OF MATERIAL [SPECIFY SPECIES & ROUTE] LC50 DE LA MATIÉRE / [PRÉCISER L'ESPECE ET LA VOIE D'ADMINISTRATION]	64,000 PPM (inhalation)
EXPOSURE [LIMITS] / LIMITS D'EXPOSITION	250 PPM 1000 PPM Short Term for 5 minutes
IRRITANCY OF MATERIAL/PROPRIÉTÉ IRRITANTE DE LA MATIÉRE	Eyes
SENSITIZATION OF MATERIAL / SENSIBILISATION A LA MATIÉRE	None
SYNERGISTIC MATERIALS / MATÉRES SYNERGIQUES	Existing liver disease or other hepatotoxic agents
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]	Butyl or neoprene rubber gloves
EYE [SPECIFY] / YEUX [PRÉCISER]	Safety glasses with side shields
RESPIRATORY (SPECIFY) / APPAREIL RESPIRATOIRE (PRÉCISÉR)	Not required if ventilation is adequate (see TWAEV, (1) above) or use organic vapour cartridge
OTHER (SPECIFY) / AUTRES (PRCISER)	Clothing impervious (hands, above) apron, boots, long sleeves, if splashing is anticipated
ENGINEERING CONTROLS [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	Dyke to control spillage and prevent environmental contamination; if fire potential exists, blanket with foam as precaution Ventilate contaminated area; recover free liquid with explosion-proof pumps; absorb residue on an inert sorbent (dry sand, earth) and store in closed containers for disposal
WASTE DISPOSAL / ÉLIMINATION DES RÉSIDUS	Do not flush to sewer; may be incinerated in approved facility
HANDLING PROCEDURES AND EQUIPMENTS / MÉTHODES ET ÉQUIPEMENT POUR LA MANUTENTION	Use with adequate ventilation. Although methyl alcohol is no a static accumulator, ground the container before handling to prevent static discharge which may cause ignition. Do not cut, drill, weld or grind on or near this container. Avoid prolonged contact with skin and wash work clothes frequently. An eye bath and safety shower should be available near the workplace.
STORAGE REQUIREMENTS / EXIGENCES D'ENTREPOSAGE	Store and use in a cool dry environment, away from source of ignition, heat and oxidizing agents.
SPECIAL SHIPPING INFORMATION / RENSEIGNEMENTS SPÉCIAUX POUR L'EXPÉDITION	Methyl Alcohol Class 3, Packing Group II, B2, D1A: D2B

SECTION VIII – FIRST AID MEASURES / PREMIERS SOINS

SKIN CONTACT: Wash with soap and plenty of water. Remove contaminated clothing and clean or launder thoroughly.

EYES CONTACT: Wash eyes with plenty of water, holding eyelids open. Seek medical assistance promptly if there is irritation.

INHALATION: Remove from contaminated area promptly. **CAUTION:** Rescuer must not endanger himself! If breathing stops, administer artificial respiration and seek medical help promptly.

INGESTION: Quick action is vital because of the rapidity of methyl alcohol absorption. If the victim is conscious give plenty of water and induce vomiting. Keep victim's head below the hips to prevent inhalation of vomited material and introduce fingers into the throat. Seek medical help promptly.

ADDITIONAL INFORMATION / RENSEIGNEMENTS SUPPLÉMENTAIRES	
--	--

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:

WHMIS CLASSIFICATION: Class D, 2B