




G.K. Chemical Specialties Co. Inc.  
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## SAFETY DATA SHEET (SDS)

<b>PRODUCT NAME: G.K. VINEGAR (5 % Acetic Acid)</b>	
<b>HEALTH HAZARD RATING:</b>	(1)- LOW HAZARD NFPA Rating
<b>FLAMMABILITY HAZARD RATING:</b>	(0)- MINIMAL HAZARD
<b>REACTIVITY HAZARD RATING:</b>	(0)- MINIMAL HAZARD
<b>PERSONAL PROTECTION:</b>	B - (Safety glasses, Gloves,)
<b>HAZARD ALERT SIGN:</b>	

### SECTION 1 – IDENTIFICATION

<b>PRODUCT IDENTIFIER</b>	
<b>PRODUCT NAME</b>	G.K. VINEGAR
<b>MANUFACTURER'S NAME AND ADDRESS EMERGENCY PHONE NO.</b>	G.K. Chemical Specialties Co. Inc. 90 Barbados Blvd. Scarborough, Ontario M1J 1K9 (416) 261-7182 / 905 427-7605/ 416-526-4037 CHEMTREC( 24 HR EMERGENCY) 1-800-424-9300 International CHEMTREC: 1-703-527-3887
<b>SUPPLIER'S NAME AND ADDRESS EMERGENCY PHONE NO.</b>	
<b>CHEMICAL NAME</b>	ACETIC ACID SOLUTION
<b>CHEMICAL FAMILY</b>	ACID
<b>TRADE NAME AND SYNONYMS</b>	NOT APPLICABLE
<b>MATERIAL USE</b>	COMMERCIAL, INSTITUTIONAL AND INDUSTRIAL CLEANING

G.K. Chemical Specialties Co. Inc. has compiled the information and recommendations contained in this Safety Data Sheet from sources believed to be reliable and to represent the most reasonable current opinion on the subject when the SDS 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 SDS 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 SDS, 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/m<sup>3</sup> 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.

NIOSH- National institute for occupational safety and health

STEL- Short term exposure limit

TWA- Time-weighted average

PEL- Permissible exposure limit

ACGIH- American conference of governmental industrial hygienist

OSHA- Occupational safety and health act

**SECTION 2 – HAZARD IDENTIFICATION**



Dangerous Goods: Class D. DIV. 2B

**GHS CLASSIFICATION**

Eye Irritation –Category 2A  
 Skin Irritation – Category 2  
 Skin sensitization- Category 1

**HAZARDOUS SUBSTANCE (HSNO) CLASSIFICATION**

CLASS D, DIV 2B

GHS Label Elements, including precautionary statements: Hazard Statements:

**Signal word- DANGER**

**HAZARD STATEMENT**

H315: Causes skin irritation  
 H317: May cause an allergic skin reaction  
 H319: Causes serious eye irritation

**PREVENTION**

P261- Avoid breathing dust/fumes/gas/mist/vapors/spray  
 P264: Wash skin thoroughly after handling  
 P280: Wear protective gloves/ protective clothing/ eye protection/ face protection  
 P405: Store locked up

**RESPONSE**

P305+P351+P338- IF IN EYES: Rinse cautiously with water for several minutes: Remove contact lenses if present and easy to do so. Continue rinsing.  
 P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water. Shower

**POTENTIAL HEALTH EFFECTS**

SKIN: May cause skin irritation  
 EYE: Will cause irritation  
 INGESTION: May be harmful if swallowed  
 INHALATION: May be harmful if inhaled. May cause respiratory tract irritation

**SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS**

HAZARDOUS INGREDIENTS	APPROXIMATE CONCENTRATION %	C.A.S., N.A. OR U.N. NUMBERS	LD50 {SPECIFY SPECIES & ROUTE}	LC 50 SPECIFY SPECIES
Acetic Acid	3 - 7	64-19-7	Oral(Rat): 3200 mg/kg Dermal (Rabbit): 1,112mg/kg	
Water, inert	Balance	7732-18-5		

<b>SECTION 4 – FIRST AID MEASURES</b>	
<b>SKIN CONTACT</b>	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention if necessary.
<b>EYE CONTACT</b>	Immediately hold eyelids open and flush with water for at least 15 minutes. Seek medical attention.
<b>INHALATION</b>	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention if necessary
<b>INGESTION</b>	May be harmful if swallowed in large amounts. Wash out mouth with water. Do not induce vomiting. Drink 1 or 2 glasses of water. Seek immediate medical attention. Never give anything by mouth to an unconscious or convulsing person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.
<b>NOTES TO PHYSICIAN</b>	Eye burns or irritation may require extended irrigation. Swallowing may result in burns of the mouth, stomach and lower gastrointestinal tract. Aspiration of vomitus may cause lung injury.

<b>SECTION 5 – FIRE-FIGHTING MEASURES</b>	
<b>FLASH POINT ( °C)</b>	40° C (104° F) Flash point for Acetic Acid
<b>FLASH POINT METHOD</b>	Closed cup
<b>AUTOIGNITION TEMPERATURE ( °C)</b>	427° C (801° F) For Acetic Acid
<b>UPPER FLAMMABLE LIMIT ( % VOL.)</b>	16
<b>LOWER FLAMMABLE LIMIT ( % VOL. )</b>	4
<b>HAZARDOUS COMBUSTION PRODUCTS</b>	Carbon dioxide, Carbon monoxide
<b>UNUSUAL FIRE/ EXPLOSION HAZARDS</b>	None known
<b>SENSITIVITY TO MECHANICAL IMPACT</b>	No.
<b>SENSITIVITY TO STATIC DISCHARGE</b>	No
<b>EXTINGUISHING MEDIA</b>	Use extinguishing agents compatible and appropriate for the burning material. Use water spray to keep fire-exposed containers cool
<b>SPECIAL FIRE FIGHTING PROCEDURES</b>	Fire fighters should wear full protective clothing, including self-contained breathing equipment.

<b>SECTION 6 – ACCIDENTAL RELEASE MEASURES</b>	
<b>LEAK AND SPILL PROCEDURE</b>	Stop leak. Move containers from spill area. Absorb spill with vermiculite absorbent material, and place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. LARGE SPILL: Dike area to contain spill.
<b>ENVIRONMENTAL PRECAUTIONARY</b>	Prevent entry into sewers or streams. Any release to the environment should be subject to federal or local reporting requirements.
<b>PERSONAL PRECAUTIONARY MEASURES</b>	Wear protective clothing during cleanup. See section 8 for recommendations on the use of personal protective equipment. Avoid breathing vapors, mist or gas. Avoid contact with clothing and skin

<b>SECTION 7 – HANDLING AND STORAGE</b>	
<b>HANDLING PROCETURES</b>	Avoid contact with eyes and skin. Avoid ingestion. Use good industrial hygiene practices in handling this product. Keep container closed when not in use.
<b>STORAGE NEEDS</b>	Keep container tightly closed. Store in a cool area above freezing point. Keep out of the reach of children. Keep in properly labeled containers.

<b>SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION</b>	
<b>VENTILATION REQUIREMENTS</b>	Good ventilation is recommended.
<b>PROTECTIVE EQUIPMENT</b>	Ensure that eyewash stations are proximal to the work-station location. The selection of personal protective equipment will vary depending on the condition of use
<b>EYE/TYPE</b>	Splash goggles, safety glasses
<b>RESPIRATORY/TYPE</b>	Approved/ certified vapor respirator when airborne concentration exceed exposure limits. Exposure limits for Canadian provinces (Acetic Acid): 8 hrs OEL: 10 ppm (25 mg/m <sup>3</sup> ), 15 min OEL: 15 ppm (37 mg/m <sup>3</sup> ). US health exposure limits (NIOSH): PEL (Permissible): TWA 10 ppm (25 mg/m <sup>3</sup> ). ACGIH TLV: 25 mg/m <sup>3</sup> . OSHA PEL: 25 mg/m <sup>3</sup> . IDLH: 50 ppm
<b>GLOVE/TYPE</b>	Nitrile, Vinyl, Butyl impervious gloves
<b>FOOTWEAR/TYPE</b>	Boots. Chemical resistant and as specified by the workplace
<b>BODY/TYPE</b>	Protective clothing is required. Use impervious clothing (apron, coveralls). The selection of personal protective equipment will vary depending on the conditions of use.

<b>SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES</b>	
<b>APPEARANCE – PHYSICAL STATE</b>	Thin clear liquid
<b>ODOUR</b>	Vinegar
<b>ODOUR THRESHOLD (PPM)</b>	Not determined
<b>PH</b>	2.3 ± 0.5 concentrate
<b>MELTING POINT ( °C)</b>	See freezing point
<b>BOILING POINT ( °C)</b>	>100°C (212° F) INITIAL
<b>FREEZING POINT ( °C)</b>	0°C (32° F)
<b>EVAPORATION RATE</b>	<0.8 (n-Butyl Acetate = 1)
<b>FLAMMABILITY</b>	Not combustible
<b>FLASH POINT ( °C)</b>	40°C (104° F) For Acetic acid
<b>AUTO IGNITION TEMPERATURE</b>	427°C (801° F) For acetic Acid
<b>DECOMPOSITION TEMPERATURE</b>	Not available
<b>VAPOUR DENSITY</b>	Same as water
<b>VAPOUR PRESSURE</b>	Same as water
<b>SOLUBILITY</b>	Completely soluble in water
<b>VISCOSITY</b>	Thin liquid
<b>% VOLATILE BY VOLUME</b>	95± 0.5 %
<b>SPECIFIC GRAVITY</b>	1.01± 0.02 gm / cm <sup>3</sup> @ 20°C

<b>SECTION 10 – STABILITY AND REACTIVITY</b>	
<b>REACTIVITY</b>	Strong bases, Oxidizers
<b>CHEMICAL STABILITY</b>	Stable under normal conditions
<b>POSSIBILITY OF HAZARDOUS REACTIONS</b>	Non known
<b>CONDITIONS TO AVOID</b>	Store away from oxidizing agents, strong bases
<b>INCOMPATIBLE MATERIALS</b>	Avoid contact with strong oxidizers, strong bases, Permanganates.
<b>HAZARDOUS DECOMPOSITION PRODUCTS</b>	Carbon oxides

<b>SECTION 11 – TOXICOLOGICAL INFORMATION</b>	
<b>TOXICITY EFFECTS ON ANIMALS</b>	<b>Figures for Acetic Acid (64-19-7):</b> Acute oral toxicity (LD50): 3,200 mg/kg (Rat), LD50 dermal (Rabbit): 1,112 mg/kg. LC50 Inhalation Vapor (Rat): 11,000 mg/ m <sup>3</sup> .
<b>TOXIC EFFECTS ON HUMANS</b>	<b>Inhalation:</b> Vapors are primarily water; exposure is not likely to be hazardous. <b>Ingestion:</b> May cause digestive tract irritation or ulceration, burns of the mouth and throat with abdominal pain, vomiting. <b>Skin contact:</b> Prolonged contact may cause skin irritation with local redness. Repeated contact may cause skin burns. <b>Eye contact:</b> May cause severe irritation.
<b>CHRONIC EFFECTS ON HUMANS</b>	Prolonged contact with skin may defat tissue causing dermatitis or skin problems.
<b>CARCINOGENICITY</b>	No evidence
<b>TERATOGENICITY</b>	No data available
<b>MUTAGENICITY</b>	No evidence
<b>REPRODUCTIVE EFFECTS</b>	No evidence

<b>SECTION 12 – ECOLOGICAL INFORMATION</b>	
<b>ECOTOXICITY DATA</b>	<b>Figures for Acetic Acid (64-19-7):</b> Toxicity to fish (LC50), Oncorhynchus mykiss (Rainbow trout): >1,000 mg /L /96 h, static test. Acute toxicity to aquatic invertebrates: EC50, Daphnia magna (Water flea): >300 mg / L /48 h.. Material is practically non-toxic to fish. Acetic Acid has high biochemical oxygen demand, and a potential to cause oxygen depletion in aquatic systems
<b>BIODEGRADABILITY</b>	Readily biodegradable
<b>PRODUCTS OF DEGRADATION</b>	No relevant data found

<b>SECTION 13 – DISPOSAL CONSIDERATIONS</b>	
<b>WASTE DISPOSAL</b>	Disposal of all wastes must be done in accordance with municipal, provincial and federal regulations. Keep out of waterways.
<b>INFORMATION ON SAFE HANDLING FOR DISPOSAL INCLUDING ANY CONTAMINATED PACKAGING</b>	Suitable waste facility.

<b>SECTION 14 – TRANSPORT INFORMATION</b>	
<b>UN NUMBER</b>	Not regulated
<b>UN PROPER SHIPPING NAME</b>	
<b>TRANSPORT HAZARD CLASS</b>	Not regulated
<b>PACKAGING GROUP</b>	
<b>ENVIRONMENTAL HAZARDS</b>	NO
<b>TRANSPORT IN BULK, if applicable</b>	NOT AVAILABLE
<b>SPECIAL PRECAUTIONS</b>	Guide to Canadian Transportation/ Emergency Response Guidebook (ERG): # 153

<b>SECTION 15 – REGULATORY INFORMATION</b>	
<b>SAFETY HEALTH &amp; ENVIRONMENTAL REGULATIONS SPECIFIC TO THE PRODUCT</b>	<p>U.S. TSCA inventory Status: All components of this product are either on the Toxic Substances Control Act (TSCA) INVENTORY List or exempt.</p> <p>Canadian DSL Inventory Status: All components of this product are either on the Domestic Substances List (DSL) or the Non-Domestic Substances List (NDSL) or exempt.</p>

<b>SECTION 16 – OTHER INFORMATION</b>	
<b>PREPARED BY:</b>	Gus Kaklamanos - Chemist
<b>TELEPHONE NO.:</b>	416-261-7182
<b>DATE OF THE LATEST REVISION OF SDS:</b>	<b>October 2, 2017</b>