Page 1 of 6 GC-041

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision Date: 4/3/2020 1. PRODUCT & COMPANY IDENTIFICATION Product Name 1.1 HAND SANITIZER GEL Chemical Name Ethanol solution 1.3 Synonyms NA 1.4 Trade Names Hand Sanitizer Gel 1.5 Product Use: Hand Sanitizer 1.6 Distributor's Name: 1.7 Distributor's Address 1.8 Emergency Phone CHEMTREC +1 (703) 527-3887 / +1 (800) 424-9300 1.0 Business Phone / Fax: 2. HAZARDS IDENTIFICATION 2.1 Hazard Identification: This product is classified as a HAZARDOUS SUBSTANCE but not as DANGEROUS GOODS according to the dassification criteria of NOHSC: 1088 (2004) and ADG Code (Australia). WARNING! HIGHLY FLAMMABLE LIQUID AND VAPOR. CAUSES SERIOUS EYE IRRITATION. Classification: Flam. Liq. 2; Eye Irrit. 2B 2.2 Label Elements: Hazard Statements (H): H225 - Highly flammable liquid and vapor. H319 - Causes serous eye irritation. Precautionary Statements (P): P210 - Keep away from heat/sparks/open flame/hot surfaces - No Smoking, P233 - Keep container tightly closed, P261 - Avoid breathing vapors/mist/spray, P272 -Contaminated work clothing should not be allowed out of the workplace. P280 - Wear protective eye protection/face protection. P305+P351+P338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing. P370+P378 - In case of fire: Use CO2, Halon (if permitted), dry chemical, or foam for extinction. P403+P235 -Store in a well-ventilated place. Keep cool. P501 - Dispose of contents/container to a licensed treatment, storage or disposal facility (TSDF). 2.3 Other Warnings: KEEP OUT OF REACH OF CHILDREN. In the event of an exposure or medical inquiry involving this product, please contact a physician or local poison control center, who may seek advice from the U.S. manufacturer, and show them this 3. COMPOSITION & INGREDIENT INFORMATION EXPOSURE LIMITS IN AIR (mg/m3) **ACGIH** NOHSC **OSHA** ppm ppm ppm ES-ES-ES-CHEMICAL NAME(S) CAS No. RTECS No. EINECS No OTHER 64-17-5 KQ6300000 200-578-6 70-80 1000 3000 1000 1800 NF 1000 1900 3300 ETHANOL (SD ALCOHOL 40B) Flam. Liq. 2; H225 231-191-2 NE NF NF NE NE 7732-18-5 ZC0110000 20-30 NE NE WATER MA8050000 200-289-5 1-5 56-81-5 NA NA NF NF NF NA NA NA **GLYCERIN** 57-55-6 TY200000 200-338-0 1-5 NA NA 150 474 NF NA NA NA PROPYLENE GLYCOL Skin Irrit. 3; Eye Irrit. 2; H316, H320 NA NA NA 0-0.5 NA NA NF NF NF NA NA NA CARBOPOL® ETD 2020 Flam liq. 2; Aquatic Chronic 3; H225, H413 0-0.1 102-71-6 NA 203-049-8 NA NA NE NE NE NA NA NA 85% TRIETHANOLAMINE 4. FIRST AID MEASURES First Aid: DO NOT INDUCE VOMITING. Contact ChemTrec at +1 (703) 527-3887 or the nearest Poison Control Ingestion: Center or local emergency telephone number for assistance and instructions. Seek immediate medical attention. If vomiting occurs spontaneously, keep victim's head lowered (forward) to reduce the risk of Flush eyes thoroughly with copious amounts of water for at least 15 minutes, holding eyelid(s) open to Eyes: ensure complete flushing. If irritation persists, seek immediate medical attention. Remove contaminated clothing and wash affected areas with soap and water. If irritation persists, seek Skin: prompt medical attention. Do not wear contaminated clothing until after it has been properly deaned. Inhalation: Remove victim to fresh air at once. If breathing is difficult, administer supplemental oxygen and seek immediate medical attention. If breathing stops, perform artificial respiration.

SDS Revision: 1.0

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards

Page 2 of 6 GC-041

SDS Revision Date: 4/3/2020

4. FIRST AID MEASURES - cont'd Effects of Exposure 4.2 Ingestion: If product is swallowed, may cause nausea, vomiting and/or diarrhea. Moderately irritating to the eyes. Eyes: This product can cause mild, transient skin irritation with short-term exposure. This product can cause Skin: allergic skin reactions (e.g., rashes, welts, dermatitis) upon prolonged or repeated exposure. Vapors of this product may be irritating to the nose, throat and other tissues of the respiratory system Symptoms of Overexposure: 4.3 Symptoms of skin overexposure may include redness, itching, and irritation of affected areas. Overexposure in eyes may cause redness, itching and watering. The product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) upon prolonged or repeated exposure. Acute Health Effects: 44 Moderate irritation to eyes and skin near affected areas. Additionally, high concentrations of vapors can cause drowsiness, dizziness, headaches and nausea. Chronic Health Effects: 4.5 The material may accentuate any pre-existing dermatitis condition. Target Organs: 4.6 Eyes, Skin & Respiratory System. 4.7 Medical Conditions Persons with pre-existing skin disorders, eye problems, or impaired HEALTH 1 Aggravated by Exposure: kidney function may be more susceptible to the effects of the **FLAMMABILITY** 3 PHYSICAL HAZARDS 0 PROTECTIVE EQUIPMENT B **EYES** SKIN 5. FIREFIGHTING MEASURES Fire & Explosion Hazards Keep away from heat, lit cigarettes, sparks & open flame. Keep container closed. When exposed to high temperatures, may produce hazardous decomposition products such as oxides of carbon (e.g., CO, CO2) and nitrogen (e.g., NOx) and smoke. 5.2 Extinguishing Methods: Water, Foam, CO2, Dry Chemical, Halon (if permitted) Firefighting Procedures: 5.3 As in any fire, wear MSHA/NIOSH approved self-contained breathing apparatus (pressuredemand) and full protective gear. Keep containers cool until well after the fire is out. Use water spray to cool fire-exposed surfaces and to protect personnel. Fight fire upwind. Prevent runoff from fire control or dilution from entering sewers, drains, drinking water supply, or any natural waterway. Firefighters must use full bunker gear including NIOSH-approved positive pressure selfcontained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies 6. ACCIDENTAL RELEASE MEASURES 6.1 Spills Before cleaning any spill or leak, individuals involved in spill cleanup must wear appropriate Personal Protective Equipment. CAUTION - may be slippery if spilled. For small spills (e.g., < 1 gallon (3.8 L)) wear appropriate personal protective equipment (e.g., goggles, gloves). Maximize ventilation (open doors and windows) and secure all sources of ignition. Remove spilled material with absorbent material and place into appropriate closed container(s) for disposal. Dispose of properly in accordance with local, state and federal regulations. Wash all affected areas and outside of container with plenty of warm water and soap. Remove any contaminated dothing and wash thoroughly before reuse. For large spills (e.g., ≥ 1 gallon (3.8 L)), deny entry to all unprotected individuals. Dike and contain spill with inert material (e.g., sand or earth). Use ONLY non-sparking tools for recovery and cleanup. Transfer liquid to containers for recovery or disposal and solid diking material to separate containers for proper disposal. Remove contaminated dothing promptly and wash affected skin areas with soap and water. Keep spills and cleaning runoffs out of municipal sewers and open bodies of water. 7. HANDLING & STORAGE INFORMATION Work & Hygiene Practices: Use normal hygiene practices. Avoid direct skin contact. Wash hands thoroughly after using this product and before 7.1 eating, drinking, or smoking. Good personal hygiene practices, such as washing any skin contact areas and removing contaminated clothing, are recommended. 7.2 Storage & Handling: Keep away from sources of heat 73 Special Precautions Follow all instructions on product label. Keep container closed when not in use. Keep this and all chemicals out of reach 8. EXPOSURE CONTROLS & PERSONAL PROTECTION Exposure Limits: NOHSC **OSHA** OTHER 8.1 ppm (mg/m³) CHEMICAL NAME(S) TLV STEL ES-TWA STEL PEAK PEL STEL IDLH ETHANOL (SD ALCOHOL 40B) 1000 3000 1000 1800 NE 1000 1900 3300 PROPYLENE GLYCOL NA NA. 150 474 NF NA NA General mechanical (e.g., fans) or natural ventilation is sufficient when this product is in use. 8.2 Ventilation & Engineering Use local or general Controls: exhaust ventilation to effectively remove and prevent buildup of vapors or mist generated from the handling of this product. Ensure that an eyewash station, sink or was hoasin is available in case of exposure to eyes

Page 3 of 6

GC-041 Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision: 1.0 SDS Revision Date: 4/3/2020 8. EXPOSURE CONTROLS & PERSONAL PROTECTION – cont'd 8.3 Respiratory Protection: Not required under normal conditions of use. In instances where vapors or sprays of this product are generated, and respiratory protection is needed, use only protection authorized by 29 CFR §1910.134, applicable U.S. State regulations, or the Canadian CAS Standard Z94.4-93 and applicable standards of Canadian Provinces, EC member States, or Australia. Eye Protection: AVOID EYE CONTACT DUE TO IRRITATION POTENTIAL. Wear protective eyewear (e.g., safety 8.4 glasses with side-shield) at all times when handling large quantities (e.g., ≥ 1 gallon (3.8 L)) of this product. Always use protective eyewear when cleaning spills or leaks. Contact lenses pose a special hazard; soft lenses may absorb and concentrate irritants. 8.5 Hand Protection: None required under normal conditions of use. However, may cause skin irritation in some sensitive individuals. If anticipated that prolonged & repeated skin contact will occur during use of this product, wear latex or rubber gloves for routine industrial use. If necessary, refer to U.S. OSHA 29 CFR §1910.138, the appropriate standards of Canada, of the EU member states. Body Protection: 8.6 No special body protection is required under typical circumstances of use and handling. If necessary, refer to appropriate standards of Canada, the EU member states, or U.S. OSHA. 9. PHYSICAL & CHEMICAL PROPERTIES 9.1 Appearance: Clear to slightly hazy liquid 9.2 Odor: NA 9.3 Odor Threshold: NA 9.4 pH: 5-7.5 9.5 Melting Point/Freezing Point: NA 9.6 Initial Boiling Point/Boiling 78.3 °C (172.94 °F) as ethanol Range: 9.7 Flashpoint: 17.22 - 18.33 °C (63 - 65 °F) as ethanol 9.8 Upper/Lower Flammability LEL 3.3, UEL 19.0 9.9 Vapor Pressure: ND 9.10 Vapor Density: NA 9.11 Relative Density: 0.840 - 0.860

10. STABILITY & REACTIVITY

Solubility:

Viscosity:

Other Information:

Partition Coefficient (log Pow):

Decomposition Temperature:

Autoignition Temperature

Soluble in water

422 °C (793 °F)

NA

NA

NA

NA

9.12

9.13

9.14

9.15

9.16

9.17

10.1	Stability:	Relatively stable under ambient conditions when stored properly.
10.2	Hazardous Decomposition Products:	If exposed to extremely high temperatures, products of thermal decomposition may include irritating vapors and toxic gases (e.g., oxides of carbon & nitrogen).
10.3	Hazardous Polymerization:	Will not occur.
10.4	Conditions to Avoid:	Exposure or contact to extreme temperatures, incompatible chemicals, strong light sources, sparks, flame.
10.5	Incompatible Substances:	Strong oxidizers, peroxides, strong acids or alkalis.

44 TOVICOLOGICAL INFORMATION

		11. TOXICOLOGI	CAL INFORM	MATION		
11.1	Routes of Entry:	Inhalation: YES	Absorption:	YES	Ingestion:	NO
11.2	Toxicity Data:	This product has NOT been tested on anim	als to obtain toxicol	ogy data.		
11.3	Acute Taxiaity:	See Section 4.4				
11.4	Chronic Toxicity:	See Section 4.5				
11.5	Suspected Carcinogen:	uspected Carcinogen: Ethanol: California Proposition 65 ((CA65) ethanol in alcoholic beverages)				
11.6	Reproductive Toxicity:	This product is not reported to produce repr	This product is not reported to produce reproductive toxicity in humans.			
	Mutagenicity:	This product is not reported to produce mutagenic effects in humans.				
	Embryotoxicity:	otoxicity: This product is not reported to produce embryotoxic effects in humans.				
	Teratogenicity:	Teratogenicity: This product is not reported to produce teratogenic effects in humans.				
	Reproductive Toxicity:	Reproductive Toxicity: This product is not reported to produce reproductive effects in humans.				
11.7	Irritancy of Product:	of Product: See Section 4.2				
11.8	Biological Exposure Indices:	NE NE				
11.9	Physician Recommendations:	Physician Recommendations: Treat symptomatically,				

Page 4 of 6 GC-041

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision: 1.0 SDS Revision Date: 4/3/2020 12. ECOLOGICAL INFORMATION 12.1 Environmental Stability: There are no specific data available for this product. The components of this product will slowly degrade over time into a variety of organic compounds. Specific environmental data available for the components of this product are as follows: Ethanol: In water, will volatilize and probably degrade. Effects on Plants & Animals: 12.2 There are no specific data available for this product. 12.3 Effects on Aquatic Life: There are no specific data available for this product; however, very large releases of this product may be harmful or fatal to overexposed aquatic life. 13. DISPOSAL CONSIDERATIONS 13.1 Waste Disposal: Waste disposal must be in accordance with appropriate Federal, state, and local regulations. 13.2 Special Considerations: U.S. EPA Waste Number: D001 (characteristic - ignitable) 14. TRANSPORTATION INFORMATION The basic description (ID Number, proper shipping name, hazard class & division, packing group) is shown for each mode of transportation. Additional descriptive information may be required by 49 CFR, IATA/ICAO, IMDG and the CTDGR. 49 CFR (GND): UN1170, ETHANOL SOLUTION, 3, II, (LTD QTY, IP VOL ≤ 1.0 L); or CONSUMER COMMODITY, ORM-D - until 12/31/2020 * 14.2 IATA (AIR): UN1170, ETHANOL SOLUTION, 3, II, (LTD QTY, IP VOL ≤ 0.5 L); or ID8000, CONSUMER COMMODITY, 9 (IP VOL ≤ 0.5 L) IMDG (OCN): 14.3 UN1170, ETHANOL SOLUTION, 3, II, (LTD QTY, IP VOL ≤ 1.0 L) 14.4 TDGR (Canadian GND): UN1170, ETHANOL SOLUTION, 3, II, (LTD QTY, IP VOL ≤ 1.0 L) 14.5 ADR/RID (EU): UN1170, ETHANOL SOLUTION, 3, II, (LTD QTY, IP VOL ≤ 1.0 L) SCT (MEXICO): UN1170, ETANOL EN SOLUCIÓN, 3, II, (CANT. LTDA., (IP VOL ≤ 1.0 L)) 14.7 ADGR (AUS): UN1170, ETHANOL SOLUTION, 3, II, (LTD QTY, IP VOL ≤ 1.0 L) 15. REGULATORY INFORMATION SARA Reporting Requirements: 15.1 This product does not contain any substances subject to SARA Title III, section 313 reporting requirements. SARA TPO 15.2 There are no specific Threshold Planning Quantities for the components of this product. TSCA Inventory Status The components of this product are listed on the TSCA Inventory 15.3 15.4 CERCLA Reportable Quantity: Ethanol: 2,270 kg (5,000 lbs) 15.5 Other Federal Requirements: This material does not contain any hazardous air pollutants. None of the components in this product are listed as priority pollutants under the CWA. None of the components in this product are listed as toxic pollutants under the CWA. 15.6 Other Canadian Regulations This product has been classified according to the hazard criteria of the CPR and the SDS contains all of the information required by the CPR. The components of this product are listed on the DSL/NDSL. None of the components of this product are listed on the Priorities Substances List. WHMIS B2, D2B (Flammable Liquid, Other Toxic Effects) 15.7 State Regulatory Information: Ethanol is found on the following state criteria list: CA, NJ, FL, MA, MN, PA and WA. No other ingredients in this product, present in a concentration of 1.0% or greater, are listed on any of the following state criteria lists: California Proposition 65 (CA65), Delaware Air Quality Management List (DE), Florida Toxic Substances List (FL), Massachusetts Hazardous Substances List (MA), Michigan Critical Substances List (MI), Minnesota Hazardous Substances List (MN), New Jersey Right-to-Know List (NJ), New York Hazardous Substances List (NY), Pennsylvania Right-to-Know List (PA), Washington Permissible Exposures List (WA), Wisconsin Hazardous Substances List (WI). This product does not contain any chemicals known to the State of California to cause cancer or other reproductive harm. For more information go to www.P65Warnings.ca.gov Other Requirements: This product is found on the following inventory lists: Australia - AICS, China - IECSC, Europe - ELINCS/EINEC, 15.8 Japan - ENCS; Korea - KECI; New Zealand - NZIoC; {Philippines - PICCS; USA - TSCA

Page 5 of 6 GC-041

Prep	ared to OSHA, ACC, AN	SI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards	SDS Revision: 1.0	SDS Revision Date: 4/3/2020
		16. OTHER INFORMA	TION	
16.1	Other Information:	WARNING! HIGHLY FLAMMABLE LIQUID AND VAR only. Use only as directed. Discontinue use immediat sparks, open flames, hot surfaces. No smoking. Avoid should not be allowed out of the workplace. IF IN EYE contact lenses if present and easy to do. Continue rinsi or foam for extinction. Keep container tightly closed whe KEEP OUT OF REACH OF CHILDREN.	ely if irritation develops. breathing vapors, mist of S: Rinse continuously witing. In case of fire use Co	Keep away from sources of ignition, or spray. Contaminated work dothing th water for several minutes. Remove
16.2	Terms & Definitions:	See last page of this Safety Data Sheet.		
16.3	Disclaimer:	Ge last page of this datety bata offeet.		

Page 6 of 6 GC-041

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision: 1.0

SDS Revision Date: 4/3/2020

DEFINITION OF TERMS

A large number of abbreviations and acronyms appear on a SDS. Some of these that are commonly used include the following:

GENERAL INFORMATION:

CAS No.	Chemical Abstract Service Number
RTECS No.	Registry of Toxic Effects of Chemical Substances Number
EINECS No.	European Inventory of Existing Commercial Chemical Substances Number

EXPOSURE LIMITS IN AIR:

ACGIH	American Conference on Governmental Industrial Hygienists
IDLH	Immediately Dangerous to Life and Health
NOHSC	National Occupational Health and Safety Commission (Australia)
OSHA	U.S. Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
TWA	Time Weighted Average

FIRST AID MEASURES:

CPR	Cardiopulmonary resuscitation - method in which a person whose heart has
	stopped receives manual chest compressions and breathing to circulate blood
	and provide oxygen to the body.

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM: HMIS

HEALTH, FLAMMABILITY & REACTIVITY RATINGS:

0	Minimal Hazard	
1	Slight Hazard	
2	Moderate Hazard	
3	Severe Hazard	
4	Extreme Hazard	

HEALTH **FLAMMABILITY** PHYSICAL HAZARDS PERSONAL PROTECTION

PERSONAL PROTECTION RATINGS:

A		
В	0	
С	0	
D		
E		
F	0	

G			8	
Н		0		8
ŀ		0	8	
J			4	8
ĸ	4			(3)
 x	Consult y	our supe andling d	rvisor or irections.	SOPs for



OTHER STANDARD ABBREVIATIONS:

Carc	Carcinogenic	
Irrit	Irritant	
NA	Not Available	
NR	No Results	
ND	Not Determined	
NE	Not Established	
NF	Not Found	
SCBA	Self-Contained Breathing Apparatus	
Sens	Sensitization	
STOTRE	Specific Target Organ Toxicity - Repeat Exposure	
STOT SE	Specific Target Organ Toxicity - Single Exposure	

NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

Autoignition Temperature	Minimum temperature required to initiate combustion in air with no other source of ignition
LEL	Lower Explosive Limit - lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source
UEL	Upper Explosive Limit - highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source

HAZARD RATINGS:

0	Minimal Hazard	FLAMMABILI
1.	Slight Hazard	/ Commonant
2	Moderate Hazard	
3	Severe Hazard	
4	Extreme Hazard	
ACD	Acidic	
ALK	Akaline	
COR	Corrosive	/ <
w	Use No Water	HEALTH
OX	Oxidizer	
TREFOIL	Radioactive	

TOXICOLOGICAL INFORMATION:

LDso	Lethal Dose (solids & liquids) which kills 50% of the exposed animals Lethal concentration (gases) which kills 50% of the exposed animal Concentration expressed in parts of material per million parts				
LC ₅₀					
ppm					
TD ₀	Lowest dose to cause a symptom				
TCLo	Lowest concentration to cause a symptom				
TD _{io} , LD _{io} , & LD _{io} or TC, TC _{io} , LC _{io} , & LC _o	Lowest dose (or concentration) to cause lethal or toxic effects				
IARC	International Agency for Research on Cancer				
NTP	National Toxicology Program				
RTECS	Registry of Toxic Effects of Chemical Substances				
BCF	Bioconcentration Factor				
TLm	Median threshold limit				
log Kow or log Koc	Coefficient of Oil/Water Distribution				

REGULATORY INFORMATION:

WHMIS	Canadian Workplace Hazardous Material Information System					
DOT	U.S. Department of Transportation					
TC	TC Transport Canada					
EPA	EPA U.S. Environmental Protection Agency					
DSL	DSL Canadian Domestic Substance List					
NDSL	NDSL Canadian Non-Domestic Substance List					
PSL	PSL Canadian Priority Substances List					
TSCA	U.S. Taxic Substance Control Act					
EU	EU European Union (European Union Directive 67/548/EEC)					
WGK	WGK Wassergefährdungsklassen (German Water Hazard Class)					

WORKPLACE HAZARDOUS MATERIALS IDENTIFICATION (WHMIS) SYSTEM:

0	(a)	(@	①	®	0	Ř
Class A	Class B	Class C	Class D1	Class D2	Class D3	Class E	Cless F
Compressed	Flammable	Oxidizing	Toxic	Instation	Infectious	Corrosive	Reactive

CLP/GHS (1272/2008/EC) PICTOGRAMS:

	③	②	\Diamond	0			③	(
GH 501	GHS02	GH503	GHS04	GHS05	GH 306	GHS07	GHS08	GHS09
Explosive	Flam mable	Oxidzer	Pressurized	Corrosive	Taxic	Hamful Initialing	Health Health	Environment