SAFETY DATA SHEET

SECTION 1: PRODUCT IDENTIFIER

PRODUCT NAME: Gel Heat ™ Methanol Gel Chafing Fuel

PRODUCT NUMBER: #GHBLUE

TRADE NAMES AND SYNONYMS: Solid Fuel, Chafing Dish Fuel

RECOMMENDED USE: A gelled methyl alcohol food warming fuel.

USES ADVISED AGAINST: No information available
DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Company: Hollowick Inc.
Address: 100 Fairgrounds Drive
Manlius, NY 13104
Telephone: 800-367-3015 or 315-682-2163
Fax: 1-315-682-6948

Emergency Telephone Number
Emergency Phone: 1-800-424-9300 (CHEMTREC)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture:
GHS Classification in accordance with 29CFR 1910 (OSHA HCS)
Flammable liquids (Category 2)
Acute toxicity, Oral (Category 3)
Acute toxicity, Inhalation (Category 3)
Acute toxicity, Dermal (Category 3)
Specific target organ toxicity - single exposure (Category 1)

Target Organs: Eyes, Kidney, Liver, Heart, Central nervous system

Pictograms

GHS Label elements, including precautionary statements
Signal word: Danger

Hazard statement(s)
H225 Highly flammable liquid and vapor.
H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled
H370 Causes damage to organs.

Precautionary statement(s)
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ eye protection/ face protection.
P301 + P310 IF SWALLOWED: Immediately call a **POISON CENTER** or doctor/physician.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
P501 Dispose of contents/ container to an approved waste disposal plant.

SECTION 3: INGREDIENTS

Ingredient	CAS No.	% by WT. Range	CLASSIFICATION
Methanol	67-56-1	70-72	Flammable liquids (Category 2)
	EC-No.200-659-6		Acute toxicity, Oral (Category 3)
	Index# 603-001-00-X		Acute toxicity, Inhalation (Category 3)
			Acute toxicity, Dermal (Category 3)
			STOT-SE (Category 1)
All other hazardous components		Are less than 1%	

SECTION 4: FIRST-AID PROCEDURES

INHALATION: METHYL ALCOHOL (METHANOL): NARCOTIC/NEUROTOXIN.
**FIRST AID- Remove form exposure area to fresh air immediately. If breathing has stopped, perform artificial respiration, if breathing is difficult give oxygen. Keep person warm and at rest. Treat symptomatically and supportively. Get medical attention immediately.

SKIN CONTACT: METHYL ALCOHOL (METHANOL): IRRITANT/NARCOTIC/NEUROTOXIN.
**FIRST AID- Remove contaminated clothing and shoes immediately. Wash affected area with soap or mild detergent and large amounts of water until no evidence of chemical remains (approximately 15-20 minutes). Get medical attention immediately.

EYE CONTACT: METHYL ALCOHOL (METHANOL): IRRITANT.
**FIRST AID- Wash eyes immediately with large amounts of water or normal saline, occasionally lifting upper and lower lids, until no evidence of chemical remains (approximately 15-20 minutes). Remove contact lenses, if worn, after initial flush. Get medical attention immediately

INGESTION: METHYL ALCOHOL (METHANOL): NARCOTIC/NEUROTOXIN.
**FIRST AID- Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Get medical attention immediately.

****ANTIDOTE**:** The following antidote(s) have been recommended. However, the decision as to whether the severity of poisoning requires administration of any antidote and actual dose required should be made by qualified medical personnel.

METHANOL POISONING:
Give ethanol, 50% (100 proof), 1.5 ml/kg orally initially, diluted to no more than 5% solution, followed by 0.5-1.0 ml/kg every 2 hours orally or intravenously for 4 days in order to reduce metabolism of methanol and to allow time for its excretion. Blood ethanol level should be in the range of 1-1.5 mg/ml (Dreisbach, Handbook of Poisoning, 12th ed.). Antidote should be administered by qualified medical personnel. Oral or intravenous administration of 4 -methylpyrazole inhibits alcohol dehydrogenase and has been used effectively as an antidote for methanol or ethylene glycol poisoning (Ellenhorn and Barceloux, Medical Toxicology).

SECTION 5: FIRE FIGHTING MEASURES

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:
FIRE AND EXPLOSION HAZARD: DANGEROUS FIRE HAZARD WHEN EXPOSED TO HEAT OR FLAME. VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL A CONSIDERABLE DISTANCE TO A SOURCE OF IGNITION AND FLASH BACK.

Flash Point: 78°F TCC	LEL %:5.87
Auto-ignition Temp: 890°F	UEL %:35.2

SUITABLE EXTINGUISHING MEDIA: Foam--> x CO2--> x Dry Chemical--> x Water-fog--> x Other-->

CONDITIONS OF FLAMMABILITY: Flammable in the presence of a source of ignition when the temperature is above the flash point.

ADVICE FOR FIREFIGHTERS: Shut off source. Keep unnecessary people away; isolate hazard area and deny entry. Avoid breathing vapors, stay upwind do not spray pool fires directly. A solid stream of water or foam directed into hot burning liquid can cause frothing. Move container from fire area if you can do it without risk. Apply cooling water to sides of containers that are exposed to flames until well after fire is out. For massive fire in cargo area, use unmanned hose holder or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tank due to fire. Water fog may be used to cool closed containers to prevent pressure build up and possible auto ignition or explosion when exposed to extreme heat. Cool containers with water-fog from as far a distance as possible. Wear NIOSH approved self-contained breathing apparatus for confined spaces. Use full fire-fighting protective clothing. If protective equipment is not available or not used, fight fire from a protected location or safe distance.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Keep containers tightly closed. Flammable Solid; isolate from all sources of ignition. Closed containers exposed to flame and heat may erupt, scattering fragments.

COMBUSTION PRODUCTS: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, carbon oxides and other unidentified organic compounds evolve when this material undergoes combustion.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTIVE MEASURES: Flammable Solid; Eliminate ignition sources in the vicinity of the spill or released vapor. Immediately evacuate all nonessential people. Verify that responders are properly trained and wearing appropriate respiratory equipment and fire resistant protective clothing during cleanup operations. For large spills evacuate downwind areas as conditions warrant to prevent exposure and to allow vapors or fumes to dissipate.

METHODS FOR CONTAINMENT AND CLEAN UP: Use explosion proof equipment. Shut off valves, contain spill, keep out of water sources and sewers, for smaller spills add non-flammable absorbent in spill area. For large spills use foam on spill to minimize vapors clean up by vacuuming then using non-flammable absorbent. Place all saturated absorbent, using non-sparking tools, in an approved container for disposal. Minimize breathing vapors and skin contact, ventilate confined areas, open all windows and doors, assure conformity with applicable government regulations.

SECTION 7: HANDLING AND STORAGE

PERSONAL PRECAUTIONARY MEASURES: This material presents a fire hazard. Liquid quickly evaporates and forms vapor (fumes), which can catch fire and burn with explosive violence. Invisible vapor spreads easily and can be set on fire by many sources, such as pilot lights, welding equipment, and electrical motors and switches. Vapor is heavier than air and can travel considerable

distance to a source of ignition and flash back. Avoid breathing vapors in top of shipping container. Use with adequate ventilation. Avoid contact with eyes, skin and clothing.

HANDLING INFORMATION: Avoid work practices that may release volatile components in the atmosphere. Avoid contaminating soil or releasing material into sewage and drainage systems. Use non-sparking tools to open or close containers.

STATIC HAZARD: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not be sufficient. For more information refer to OSHA Standard 29CFR 1910.106 “Flammable and Combustible Liquids” and National Fire Protection Association (NFPA 77) “Recommended Practice on Static Electricity”.

CONDITIONS FOR SAFE STORAGE: Follow maximum allowed pile heights specified in the BOCA codes or the NFPA manual. Local fire authorities should be notified for storage of this material in any quantity. Local permits are required for storage in warehouse quantities. Do not store above 120EF. Store large quantities only in cool, dry areas in buildings designed to comply with OSHA 1910.106. Keep containers tight and upright to prevent leakage. Do not contact with oxidizing materials. Keep containers closed when not in use. Do not take internally.

CONTAINER WARNINGS: Containers should be Bonded and Grounded when pouring. Avoid free fall of liquid in excess of a few inches. Empty containers release residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, or expose such containers to heat, sparks, static electricity or other sources of ignition. Do not attempt to clean. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum re- conditioner.

SECTION 8: EXPOSURE CONTROL (PERSONAL PROTECTION)

EXPOSURE GUIDELINES:

Ingredient	CAS No.	% by WT. Range	Exposure Limits
Methanol	67-56-1	70-72	200ppm TLV(ACGIH)
			250ppm STEL(ACGIH)
			200ppm TWA(OSHA)
			200ppm TWA(NIOSH)
			6000pppm(IDLH)
All other hazardous components		Are less than 1%.	

Key:
(PEL) = Permissible Exposure Limit OSHA
(TLV) = Threshold Limit Value OSHA & ACGIH
(STEL) = Short Term Exposure Limit ACGIH
(WEEL) = USA. Workplace Environmental Exposure Levels
(TWA) = Time Weighted Average
CAS = Chemical Abstracts Registry Number
IDLH = Immediate Danger to Life and Health
N.E. =None Established

EXPOSURE GUIDELINES: Consider the potential hazards of this material (Section2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended.

ENGINEERING CONTROLS: Provide general dilution or local exhaust ventilation in volume and pattern to keep concentrations within permitted exposure limits. All areas should be ventilated in accordance with OSHA Regulation 29 CFR Part1910. Explosion proof motors should be used in mechanical ventilation.

RESPIRATORY PROTECTION: For vapor concentrations 1 to 10 times ACGIH TLV and air purifying NIOSH/MSHA Approved respirator with full face-piece and organic vapor cartridges. For concentrations over 10 times ACGIH TLV and in confined areas use an approved positive pressure full face-piece supplied air respirator.

BODY CLOTHING: No protective equipment is needed under normal use conditions. However employees must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged contact with this substance. Use chemical resistant apron or other impervious clothing. Remove and wash contaminated clothing before reuse.

SKIN PROTECTION: No protective equipment is needed under normal use conditions. However employees must wear appropriate protective gloves to prevent contact with this substance. Rubber or neoprene chemical resistant gloves.

EYE/FACE PROTECTION: No protective equipment is needed under normal use conditions. However employees should use safety eyewear with splash guards or face shield.
Emergency shower and eyewash should be easily accessible to the work area.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE, COLOR AND ODOR: A gelled methyl alcohol with blue color and an alcohol odor.

Odor Threshold	No data available
pH	7.5 – 8.5
Volatile	98%
Melting/Freezing Point	No data available
Boiling Range	148-180°F
Specific Gravity	0.802@20°C
Vapor Pressure	No data available
Vapor Density (air=1)	No data available
Water Solubility	Soluble
Partition Coefficient n-Octanol/Water	No data available
Evaporation Rate (Butyl Acetate=1)	2.1
Flash Point	78 °F - closed cup
Upper Flammability Limit	37.2% (V)
Lower Flammability Limit	5.87% (V)
Auto-Ignition Temperature	890°F
Decomposition Temperature	No data available
Viscosity	No data available
Explosive Properties	No data available
Oxidizing Properties	No data available
Other Information	No data Available

SECTION 10: STABILITY AND REACTIVITY INFORMATION

CHEMICAL STABILITY: Unstable ( ) **Stable (X)**

POSSIBILITY OF HAZARDOUS REACTIONS: Vapors may form explosive mixtures with air.

CONDITIONS TO AVOID: Heat, Sparks, Pilot Lights, Static Electricity, and Open Flame.

INCOMPATIBLE MATERIALS: Strong oxidants such as liquid chlorine, oxygen, sodium hypochlorite, inorganic acids e.g. hydrochloric acid and hydrogen peroxide.

HAZARDOUS DECOMPOSITION PRODUCTS: Fumes, Smoke, Carbon Monoxide, Aldehydes and other decomposition products where combustion is not complete.

HAZARDOUS POLYMERIZATION: May occur ( ) **Will not occur (X)**

SECTION 11: TOXICOLOGICAL INFORMATION

Routes of Entry: Inhalation--> x Skin--> x Ingestion--> x

ACUTE HEALTH EFFECTS:
Effects of overexposure:
Eye> Irritant upon direct contact;
Skin> Contact with liquid may cause irritation. Skin absorption may occur and cause metabolic acidosis and effects on the eyes and central nervous system as detailed in acute ingestion.
Inhalation> Burn product in a well ventilated area; Upon exposure to fumes, irritation of the respiratory tract or acute nervous system depression characterized by headache, dizziness, staggering gait, confusion, unconsciousness or coma.
Ingestion> Loss of coordination, dizziness, headache, nausea, CNS depression.
Chronic: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.
Typical symptoms are cardiovascular disorders, sweetish taste in the mouth, nausea, vomiting, loss of appetite, strong thirst, burning of eyes and bleeding from the nose. Damage may occur to the kidney or liver.

Medical Conditions Aggravated by Exposure> Skin contact may aggravate an existing dermatitis.

ACUTE TOXICITY:
The effects of overexposure shown in Section II are based on acute toxicity profiles. Typical values are:

Ingredient	Oral LD50(Rat)	Skin LD50(Rabbit)	Inhalation LC50
Methanol	1187-2769mg/kg	17100mg/kg	128mg/L/4hr

METHANOL:
MUTAGENIC EFFECTS: No data available

CARCINOGEN STATUS: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, NTP, OSHA or ACGIH.

REPRODUCTIVE TOXICITY: No data available

Specific target organ toxicity (STOT-SE)- single exposure (Globally Harmonized System): Causes damage to organs.
Specific target organ toxicity (STOT-RE) - repeated exposure (Globally Harmonized System): The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

ASPIRATION HAZARD: No data available

ADDITIONAL INFORMATION: No data available

SECTION 12: ECOLOGICAL INFORMATION

No information on this gelled product is available at this time.

For METHANOL the following is available:
DANGEROUS TO AQUATIC LIFE IN HIGH CONCENTRATIONS May be dangerous if it enters water intakes.
Notify local health and wildlife officials. Notify operators of nearby water intakes.

AQUATIC TOXICITY:

Toxicity to fish:
LC50 - Lepomis macrochirus (Bluegill) - 15,400.0 mg/l - 96 h
NOEC - Oryzias latipes - 7,900 mg/l - 200 h

Toxicity to daphnia and other aquatic invertebrates:
EC50 - Daphnia magna (Water flea) - > 10,000.00 mg/l - 48 h

Toxicity to algae Growth inhibition:
EC50 - Scenedesmus capricornutum (fresh water algae) - 22,000.0 mg/l - 96 h
WATERFOWL TOXICITY: No data available
PERSISTANCE AND DEGRADABILITY: aerobic Result: 72 % - rapidly biodegradable
BIOACCUMULATION: Cyprinus carpio (Carp) - 72 d at 20 °C
BIOCONCENTRATION FACTOR (BCF): 1.0
BIOLOGICAL OXYGEN DEMAND (BOD): 0.6 to 1.12 lb in 5 days
FOOD CHAIN CONCENTRATION POTENTIAL: None

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS: Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly it is the responsibility of the user to determine the proper storage, transportation, treatment and or disposal methodologies for spent materials and residues at time of disposition. Dispose in accordance with all applicable disposal regulations. Incinerate under controlled conditions in a permitted facility.

CONTAMINATED PACKAGING: Dispose of as unused product

The information offered here is for the product as shipped. Use and/or alterations to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.

RCRA: The unused product is a RCRA hazardous waste if discarded. The RCRA ID numbers are: U154 and D001.
If the waste is a spent solvent, the appropriate spent solvent code should be used.
DISPOSAL MUST BE IN ACCORDANCE WITH STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE, 48 CFR 262

SECTION 14: TRANSPORT INFORMATION

USDOT Shipping Name: Consumer Commodity ORM-D No Hazmat Required 173.150; Exceptions
For Class 3 (flammable and combustible liquids)

USDOT Hazard Classification: ORM-D "Consumer Commodity"
Emergency Response Guide: 131
Marine Pollutant: No

SECTION 15: REGULATORY INFORMATION

SARA TITLE III (Superfund Amendment and Reauthorization Act)

SECTION 302 AND 304: Extremely Hazardous Substance List (40 CFR 355) - Not Listed
SECTION 313: Toxic Chemicals Listing (40 CFR 372.65) - Listed Methanol CAS 67-56-1
SECTION 311/312: Hazard Categorization (40 CFR 370) - Acute Health, Chronic Health, and Fire

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)

SECTION 102(A) Hazardous Substances (40 CFR 302.4) - Listed Methanol CAS 67-56-1; Reportable Quantity - 5,000 pounds.
SECTION 101(14) Reportable Quantity: 5,000 lbs

Massachusetts Right To Know Components: Methanol CAS-No.67-56-1

Pennsylvania Right To Know Components: Methanol CAS-No.67-56-1

New Jersey Right To Know Components: Methanol CAS-No.67-56-1

California Proposition 65 Components:
WARNING: This product contains a chemical known to the state of California to cause birth defects or other reproductive harm.

TSCA (Toxic Substance Control Act)
Methanol CAS-No.67-56-1 is listed on the TSCA Inventory.

SECTION 16: OTHER INFORMATION

HMIS (Hazardous Materials Identification System)
Hazard Rating:

4-Extreme
3-High
2-Moderate
1-Slight
0-Insignificant

NFPA RATINGS (SCALE 0-4):	Health=2	Fire=3	Reactivity=0	
HMIS RATINGS (SCALE 0-4)	Health=2	Fire=3	Reactivity=0	PPE=G

Date of preparation: June 1, 2016 REVIEWED: June 11, 2018
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Acronyms:
ACGIH: American Conference of Governmental Industrial Hygienists
AIHA: American Industrial Hygiene Association
ANSI: American Nation Standards Institute
API: American Petroleum Institute
CERCLA: Comprehensive Emergency Response, Compensation, and Liability Act
DOT: U.S. Department of Transportation
EPA: U.S. Environmental Protection Agency
HMIS: Hazardous Materials Information System
IARC: International Agency For Research On Cancer
MSHA: Mine Safety and Health Administration
NFPA: National Fire Protection Association
NIOSH: National Institute of Occupational Safety and Health
NOIC: Notice of Intended Change (Proposed change to ACGIH TLV)
NTP: National Toxicology Program
OPA: Oil Pollution Act of 1990
OSHA: U.S. Occupational Safety & Health Administration
PEL: Permissible Exposure Limit (OSHA)
RCRA: Resource Conservation and Recovery Act
REL: Recommended Exposure Limit (NIOSH)
SARA: Superfund Amendments and Reauthorization Act of 1986 Title III
SCBA: Self-Contained Breathing Apparatus
STEL: Short-Term Exposure Limit (generally 15 minutes)
TLV: Threshold Limit Value
TSCA: Toxic Substances Control Act
TWA: Time Weighted Average (8hr.)
WHMIS: Canadian Workplace Hazardous Materials Information System