

# BHS Marketing

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## Western Briquette

### MATERIAL SAFETY DATA SHEET

#### Methanol

Date: January 30, 2001

#### I Company Identification

Company Name: BHS Marketing / Western Briquette  
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Emergency Number: Chemtrec (800) 424-9300

#### II Product Identification

Product Name:	Methanol Solution, Byproduct Methanol	
Molecular Formula:	Mixture	
Ingredients:	Cas Number:	Percentage:
Tetrahydrofuran	109-99-9	3.0-7.0%
ACGIH TLV	STEL 250 PPM	
8HR, EXP. LIMIT	TWA 200 PPM	
Water	7732-18-5	0.0-1.0%
PEL/TLV NOT ESTABLISHED		
N-Propanol		
ACGIH TLV	SKIN	
OSHA PEL	STEL 250 PPM	
OSHA PEL	TWA 200 PPM	
Methanol	67-56-1	85.0-95.0%
ACGIH TLV	SKIN	
OSHA PEL	STEL 250 PPM	
OSHA PEL	TWA 200 PPM	
N-Butanol	71-36-3	-1.0%
ACGIH TLV	CEIL 50 PPM	
OSHA PEL	SKIN	
	TWA 100 PPM	

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### **III Typical Physical Properties**

Physical Appearance:	Colorless liquid
Odor:	Alcohol
PH:	N/A
Boiling Point:	66-118°C @ 1 atmospheres
Specific Gravity:	N/A
Bulk Density:	6.67
Solubility in Water:	Miscible

### **IV Reactivity Data**

Chemical Stability:	Stable
Conditions to Avoid:	Acids, acid chlorides and acid anhydrides
Hazardous Decomposition Products:	CO, CO <sub>2</sub> and peroxides
Hazardous Polymerization:	Does not occur

### **V Toxicological Information and Interpretation**

Acute:	
Toxicological Test Data:	Rat, Oral LDLO-3 g/kg Data for Tetrahydrofuran component
	Rat, Oral LD50-2816 mg/kg Data for Tetrahydrofuran component
	Rat, Oral LD50-5628 mg/kg Data for Methanol component
	Rat, Inhalation LCLo-9000 ppm Data for Tetrahydrofuran component

### **VI Fire and Explosion Hazard Data**

Flashpoint:	<58
Extinguishing Media:	Use water fog, or dry chemical extinguishing media
Special Firefighting Procedures:	Firefighters should be equipped with self-contained breathing apparatus and turn out gear. Water may be ineffective but should be used to keep exposed containers cool

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**Primary Routes of Exposure:** Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases

**Effects of Overexposure:** Contact with the eyes may result in irritation. Prolonged or repeated skin contact may result in irritation. Ingestion of butanol may result in narcosis and possible damage to the liver. Acute overexposure to the butanol vapors may cause drowsiness, headache, nausea, dizziness, and sensitivity to light. Ingestion of large amounts of methanol results in loss of coordination, weakness, acidosis, convulsions, and respiratory failure. Kidney damage and blindness may result. Inhalation of the vapors may cause narcosis, dizziness, headache, and nausea. Symptoms of acute overexposure to propanol by all routes include irritation of the mucous membranes, failure of muscular coordination, lethargy, narcosis, and possibly death

**Chronic Effects:** Chronic overexposure to methanol vapors may cause conjunctivitis, headache, insomnia, gastric disturbances, and permanent or temporary loss of sight. Rats gavaged with methanol on day 10 of gestation showed dose-related increases in total anomalies of the testes and eye. Maternal toxicity was not observed at any dose level. Methanol was administered by inhalation to pregnant rats on days 1-19 of gestation for 7 hr/day. Dose levels were 20,000 ppm, 10,000 ppm, 5,000 ppm and 0 ppm. Methanol was teratogenic at the high doses of 10,000 ppm and 20,000 ppm.

Male and pregnant female rats were exposed to propanol 7 hrs/day for 6 weeks or through gestation to 7000, 35000 or 0 ppm. Pregnant females exposed to 7000 ppm of propanol showed decreased weight gain and slight teratogenicity was observed at this concentration. Animal studies indicate that chronic overexposure may result in liver damage in lifetime feeding studies, propanol was reported to be carcinogenic to rats when given by the oral and subcutaneous routes. Rats exposed to 100, 200, 1000 and 5000 ppm THF for 4 hrs/day for 12 weeks, exhibited adverse liver function at 1000 ppm. White blood cell count, blood sugar level and liver function were affected at 5000 ppm. The draft NTP report on a 2-year inhalation study with F344/N rats and B6C3F1 mice at 200, 600 and 1800 ppm indicated some evidence of carcinogenicity in male rats as evidenced by increased incidences of

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adenomas and carcinomas (combined) at mid and high dose groups and clear evidence of carcinogenicity in female mice as evidenced by increased incidences of hepatocellular neoplasm in all three dose groups

### **VII Recommended First Aid Measures**

Eye Exposure:	Immediately rinse eyes with running water for 15 minutes. Get immediate medical attention
Skin Exposure:	Wash affected area with water while removing contaminated clothing. Get immediate medical attention. Launder contaminated clothing before reuse
Inhalation Exposure:	Move to fresh air. Aid in breathing, if necessary, and get immediate medical attention
Ingestion Exposure: with	If swallowed, DO NOT INDUCE VOMITING. Dilute water or milk and get immediate medical attention. Never give fluids or induce vomiting if the victim is unconscious or having convulsions

### **VIII Accidental Release Measures**

Containment of Spills:	Spills should be contained, solidified and placed in suitable containers for disposal in a RCRA licensed facility. This material is RCRA hazardous due to its properties
Waste Disposal:	Incinerate or bury in a RCRA licensed facility. Do not discharge into waterways or sewer systems without proper authority

### **VIII Accidental Release Measures-Continued**

Clean up & Disposal of Spills:	Empty containers with less than 1 inch of residue may be land filled at a licensed facility. Recommend crushing or other means to prevent unauthorized reuse. Other containers must be disposed of in a RCRA licensed facility
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### **IX Handling & Storage**

Storage:	Store materials to avoid sources of ignition and excessive heat
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### **X Exposure Controls/ Personal Protection**

Appropriate

Hygienic Practices: As part of good industrial, personal hygiene and safety procedure, avoid all unnecessary exposure to the product and ensure prompt removal from eyes, skin and clothing. Maintain good housekeeping to control dust accumulations.

### **Personal Protection Equipment**

Eye Protection: Chemical Goggles, also wear a face shield if splashing hazard exists

Skin Protection: Gloves, coveralls, apron, and boots as necessary to prevent contact

Respiratory Protection: If vapors or mists are generated, wear NIOSH/MSHA approved organic vapor/mist respirator or an air-supplied respirator as appropriate

Ventilation Protection: Use local exhaust to control vapors/mists

Other Protection: Eyewash fountains and safety showers must be easily accessible. Shower after handling

### **XI Regulatory Information**

RCRA Haz. Waste No.: D001

CERCLA: Yes

Reportable Quantity: 5000 lbs. Reportable quantity for the methanol number D001 refers to this material's RCRA hazardous waste characteristic of ignitability

### **XII Additional Information**

The information in this MSDS was obtained from sources, which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its accuracy and/or completeness. User should consult experts in their review of this MSDS prior to use of the product.

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\*n/a= Not Applicable