

# MATERIAL SAFETY DATA SHEET

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## SECTION I – GENERAL INFORMATION

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Manufacturer:  
**PRESERVATION SOLUTIONS, LLC**

Emergency Telephone No.  
**(303) 642-3060**

Address:  
33941 Skyline Drive  
Golden, CO 80403 U.S.A.

FAX:  
(303) 648-6486

Chemical Name & Synonyms:  
Hydroxypropylcellulose

Trade Name: **KLUCEL G**

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## SECTION II – INGREDIENTS and OTHER COMPOUNDS

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### HAZARDOUS

### TLV UNITS

This product is considered hazardous according to OSHA hazard communication standard 29CFR1910.1200 due to flammable dust potential.

### HAZARDOUS IDENTIFICATION

#### Emergency Overview Warning:

Static charges generated by emptying package in or near flammable vapors may cause flash fire.  
May form flammable dust-air mixtures.  
May cause eye irritation by mechanical abrasion.  
Inhalation of dust may cause respiratory tract irritation.  
Surfaces subjected to spills may become slippery.

#### Potential Health Effects

May cause skin irritation by mechanical abrasion.  
Refer to Section IV below for Hazardous Combustion Products, and Section XI for Hazardous Decomposition/Hazardous Polymerization Products.

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## SECTION III – PHYSICAL DATA

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PH	/	5-8.5 (in water solution)
BOILING POINT (°F) HIGHER THAN	/	NE
VAPOR PRESSURE (mm Hg)	/	Negligible at 68°F
VAPOR DENSITY (AIR = 1)	/	NE
SOLUBILITY IN WATER	/	complete – insoluble at temperatures above 113°F
SPECIFIC GRAVITY (H <sub>2</sub> O = 1)	/	heavier than H <sub>2</sub> O
PERCENT VOLATILE BY WEIGHT (%)	/	NE
EVAPORATION RATE (EE = 1)	/	NE
LBS. PER GALLON	/	NE
APPEARANCE and ODOR:	/	White, granular solid

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## SECTION IV – FIRE and EXPLOSION HAZARD DATA

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FLASH POINT: Autoignition temp. 752°F

FLAMABLE LIMITS: LeL: NE UeL: NE

EXTINGUISHING MEDIA: Water spray, dry chemical, foam, carbon dioxide or clean extinguishing agents may be used on fires involving this product.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved (or equivalent) and full protective gear when fighting fires involving the product.

CONDITIONS TO AVOID: None known.

UNUSAL FIRE and EXPLOSION HAZARDS: Combustion products include: carbon monoxide, carbon dioxide and smoke.



If upper respiratory tract irritation occurs, use an approved dust/mist respirator to minimize exposure.  
Keep floors clean and dry. Clean up spills immediately.

#### GENERAL HYGIENIC PRACTICES

Avoid contact with eyes, skin and clothing.  
Avoid breathing dust.  
Handle in areas with adequate ventilation.  
Avoid contamination of food, beverages or smoking materials.  
Wash thoroughly after handling, and before eating, drinking or smoking.  
Remove contaminated clothing promptly and clean thoroughly before reuse.

#### RECOMMENDED EXPOSURE LIMITS

No exposure limit has been established. This product may irritate the upper respiratory tract if used under conditions that create dust or mist particulates.

#### PERSONAL PROTECTIVE EQUIPMENT

Safety glasses  
Impervious gloves  
Appropriate protective clothing  
Wear approved dust/mist respirator if user operations create dust/mist that causes irritation.

#### PROTECTIVE MEASURES DURING REPAIR AND MAINTENANCE

Eliminate ignition sources and prevent build-up of static electrical charges.  
Completely isolate and thoroughly clean all equipment, piping, or vessels before beginning maintenance or repairs.  
Keep area clean.

#### TRANSPORT INFORMATION

##### GENERAL

This product is not subject to DOT regulations. For specific information regarding transportation of this product, please call the manufacturer at 905.279.3338.

#### REGULATORY INFORMATION

##### CHEMICAL INVENTORIES

U.S. TSCA: The components of this product are included on the TSCA Inventory.  
Canadian CEPA: Included on DSL Inventory.

##### SARA TITLE III – SECTIONS 302/304

This product is not an Extremely Hazardous Substance subject to reporting under 40CFR355.

##### SARA TITLE III – SECTIONS 311 AND 312

NHH: Not a health hazard  
HC-3: Fire hazard

##### SARA TITLE III – SECTION 313

This product does not contain any chemicals subject to reporting under Section 313 of Title III of the Superfund Amendments and Reauthorization Act and 40CFR372.

##### CERCLA

The product does not contain any chemicals subject to reporting as a CERCLA Hazardous Substance under 40CFR302.4.

##### RCRA

This product is not a hazardous waste as listed in 40CFR261.33. It does not exhibit any of the hazardous characteristics list in 40CFR261, Subpart C.

##### HMIS RATINGS:

Health	1 Slight Hazard
Flammability	1 Slight Hazard
Reactivity	0 Minimal Hazard

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## SECTION IX – TOXICOLOGICAL INFORMATION

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### TOXICOLOGICAL INFORMATION

#### CARCINOGENICITY INFORMATION

Product/Similar Product – Not listed as a carcinogen by NTP. Not regulated as a carcinogen by OSHA. Not evaluated by IARC.

#### REPORTED HUMAN EFFECTS

Product/Similar Product – Not a skin irritant or skin sensitizer in repeated insult patch tests when tested as a 10% aqueous paste. Due to the physical nature of this material, may cause eye, skin and respiratory irritation.

#### REPORTED ANIMAL EFFECTS

Product/Similar Product – Acute Oral LD50 (rat): > 10 g/kg. Minimal rabbit eye irritant. No effects were observed from oral administration of up to 5% in the diet of rats for 90 days. Metabolism studies indicate that the product is not absorbed by the gastrointestinal tract.

### ECOLOGICAL INFORMATION

#### ECOTOXICOLOGICAL INFORMATION

Product/Similar Product – The 96-hour TL50 under static conditions to Rainbow trout and Bluegill fish was > 100 ppm.

#### BIODEGRADABILITY

This product is biodegradable.

### DISPOSAL CONSIDERATIONS

#### WASTE DISPOSAL

Land filling in a permitted solid or hazardous waste facility is recommended. Handling, transportation and disposal of material should be conducted in a manner to prevent a nuisance dust hazard. Fully containerize the material before handling, and protect from exposure to the outdoors. Ensure there are no restrictions on disposing of bulk or semi-bulk quantities of waste material. Disposal should be in accordance with all Federal State and local regulations.

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#### DISCLAIMER

This information and recommendations contained in the Material Safety Data Sheet, MSDS, have been compiled from sources believed to be reliable and to represent the most reasonable current opinion on the subject when the MSDS was prepared. No warranty, guaranty or representation is made as to the correctness or sufficiency of the information. The user of this product must decide what safety measures are necessary to safely use this product, either alone or in combination with other products, and determine its environmental regulatory compliance obligations under any applicable federal or state laws.

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NE = NOT ESTABLISHED

N/A = NOT APPLICABLE