



Prairie Mud Service

"Serving Western Canada with 24 Hour Drilling Mud Service"

SECTION I: IDENTIFICATION OF PRODUCT

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| Product Identifier: | KCL-1 |
| General Description: | KCL Substitute |
| Supplier: | Prairie Mud Service 738 – 6th Street Estevan, SK S4A 1A4 Phone: (306) 634-3411 Fax: (306) 634-6694 |
| Chemical Family: | Blend |
| Shipping Name: | Not applicable |
| PIN (UN/NA): | Not applicable |
| WHMIS: | Uncontrolled |
| Primary Hazard: | May cause irritation |
| Effective Date: | November 6, 2009 |

SECTION II: HAZARDOUS INGREDIENTS

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| Ingredients: | This product does not contain any regulated hazardous ingredients. |
| Weight %: | |
| C.A.S. Registry Number: | |

SECTION III: HANDLING PRECAUTIONS

Caution: Non-combustible liquid. May cause irritation to skin and eyes. Keep container closed when not in use. Use with adequate ventilation. Do not take internally. Avoid prolonged or repeated breathing of vapour. Avoid contact with skin, eyes, or clothing. Empty containers may contain residual product. Do not reuse container unless properly reconditioned.

SECTION IV: PHYSICAL & CHEMICAL DATA

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| Appearance: | Clear Liquid | Pour Point: | -20°F |
| Odor: | Mild | Initial Boiling Point: | 220°F |
| Specific Gravity: | 1.066 | Vapour Pressure | 5 mm HG @100°F |
| Density: | 8.89 | Vapour Density: | >1.0 (Air=1.0) |
| pH (neat): | 6.5-7.5 | Flash Point: | >325°F TCC |
| Viscosity: | ~25 cst @ 100°F | Evaporation Rate: | 1.7(Butyl Acetate=1.0) |
| Solubility: | Water Soluble | | |

NOTE: These physical properties are typical values for this product and not specifications.

SECTION V: FIRE AND EXPLOSION DATA

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| Flash Point: | >325°F |
| Lower Explosive Limit: | No data available |
| Upper Explosive Limit: | No data available |
| Extinguishing Media: | While this product will not normally support combustion the use of water fog, dry chemical, foam, carbon dioxide or other extinguishing agent suitable for Class B fires is recommended. Use water to cool containers exposed to fire. For large fires, use water spray or fog, thoroughly drench the burning material. |
| Unusual Fire and Explosion Hazards: | May evolve CO, CO ₂ , and /or NO _x may be formed. Do not breath smoke or fumes. Wear suitable protective equipment. |



SECTION VI: FIRST AID INFORMATION

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| Eyes: | Flush with water for at least 15 minutes while holding eyelids open. Call a physician if irritation persists. |
| Skin: | Remove contaminated clothing. Wash exposed area with soap and water for at least 15 minutes. For a large splash flood body under a shower. Call physician if rash or other symptoms develop. Launder clothes before reuse. |
| Ingestion: | If victim is conscious, immediately give victim several glasses of water and induce vomiting. Keep head below hips to avoid aspiration. Give water until vomit is clear. Call a physician. If possible, do not leave victim unattended. |
| Inhalation: | Remove to fresh air. If breathing is difficult, administer oxygen, Treat symptoms. Keep victim warm and quiet. Seek immediate medical attention. |
| Caution: | If unconscious, having trouble breathing or in convulsions, do not induce vomiting or give water. |

SECTION VII: HEALTH EFFECTS INFORMATION

Primary Routes of Exposure: Eye, Inhalation, Skin

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| Eye Contact: | Irritating to the eyes. Symptoms may include stinging, tearing, redness, and swelling. |
| Skin Contact: | Repeated or prolonged skin contact can cause mild to severe skin irritation depending on the length of exposure and on the first aid action given. Symptoms may include redness and burning. Can cause allergic contact dermatitis in susceptible individuals. |
| Ingestion: | Ingestion of large quantities (> ¼ cup) of this product may cause nausea, vomiting, and diarrhea depending on the first aid action given. |
| Inhalation: | Prolonged inhalation of mist or vapour can be harmful, causing irritation of the mucous membranes depending on the length of exposure and the first aid action given. |
| Symptoms of Exposure: | Acute: A review of available data does not identify any symptoms from exposure not previously mentioned. Chronic: Prolonged skin contact can cause dry skin and deflating resulting in irritation and dermatitis. |

SECTION VIII: REACTIVITY INFORMATION

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| Incompatibility: | Avoid contact with strong oxidizers (eg. chlorine, peroxides, chromates, nitric acid, per chlorates, concentrated oxygen, and permanganates) which can generate heat, fires, explosions and the release of toxic fumes. |
| Thermal Decomposition Products: | In the event of combustion CO, CO ₂ , and/or NO _x may be formed. Do not breathe smoke or fumes. Wear suitable protective equipment. |

SECTION IX: PERSONAL PROTECTION EQUIPMENT

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| Respiratory Protection: | Respiratory protection is not normally needed under typical use and handling conditions. If it is possible to generate significant levels of vapours, mists, or smoke, a NIOSH approved or equivalent respirator is recommended. For large spills, entry into large tanks, vessels or enclosed small spaces with inadequate ventilation, a positive pressure, self-contained breathing apparatus is recommended. |
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| Ventilation: | General ventilation is recommended. Additionally, local exhaust ventilation is recommended where vapours, mists, or aerosols may be released. |
| Protective Equipment: | Wear impermeable gloves, boots, apron, and face shield with chemical splash goggles. A full slicker suit is recommended if gross exposure is possible. |
| The availability of an eye wash station and safety shower are recommended. If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse. | |

SECTION X: SPILL & DISPOSAL INFORMATION

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| Small Spills: | Contain with absorbent material, such as clay, soil, or any commercially available absorbent. Shovel reclaimed liquid and absorbent into recovery or salvage drums for disposal. |
| Large Spills: | Dike and prevent further movement and reclaim into recovery or salvage drums or tank truck for disposal |
| For larger indoor spills, evacuate employees and ventilate area. Eliminate all sources of spark or flame. Those responsible for control and recovery should wear the protective equipment specified in section IX. Ventilate area and evacuate employees from exposure if the airborne concentration exceeds the TLV. Refer to section XIII. This product is toxic to fish. Prevent flow/discharge into lakes, ponds, streams, waterways or public water supplies. | |
| Disposal: | If this product becomes a waste, it meets the criteria of a hazardous waste as defined under the Resources Conservation and Recovery Act. As a hazardous liquid waste, it must be solidified with stabilizing agents (such as sand, fly ash, or cement) so that no free liquid remains before disposal to a licensed industrial waste landfill (Hazardous Waste Treatment, Storage and Disposal facility.) A hazardous liquid waste can also be incinerated in accordance with local, state and federal regulations. |

SECTION XI: TRANSPORTATION INFORMATION

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| All Transportation Modes: | Not D.O.T. Regulated |
| UN/ID Number: | N.O.S. |
| Hazard Class: | None |
| Packing Group: | III |
| Flash Point: | >325°F |
| Hazardous Components: | None |

The above information is supplied as a customer service and is provided in good faith. Although it has been based on data drawn from sources deemed to be reliable, Prairie Mud Service cannot guarantee its accuracy and assumes no responsibility for conditions resulting from its use.