

Panther Stable K

MATERIAL SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION OF PRODUCT

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Product Name: Stable K
Chemical Family: Neutralized amines
Product Use: Drilling Mud Additive

Work Place Hazardous Information Systems Data (WHMIS):



| Class | Work Place Hazard |
|--|-----------------------|
| D-2-B: Materials Causing Other Toxic Effects - Toxic | Skin and eye irritant |

Transportation of Dangerous Goods (TDG):

TDG Classification: Not Regulated
Package Group: Not Applicable
UN Number (PIN): Not Applicable

SECTION 2 - HAZARDOUS INGREDIENTS

| Name | Percent (%) | CAS# | OSHA PEL | ACGIH TLV | LD50 (oral rat) | LD50 (dermal rabbit) | LC50 (inhalation rat) |
|-------------------|-------------|----------|---------------|---------------|--------------------|-------------------------|--------------------------|
| 1,6-Hexanediamine | 30 -60 | 124-09-4 | Not Available | Not Available | 750 mg/kg | 1110 mg/kg | Not Determined |
| Formic Acid | 10 - 30 | 64-18-6 | Not Available | Not Available | 1100 mg/kg | Not Determined | Not Determined |

SECTION 3 - PHYSICAL DATA

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| Physical State: | Liquid | Boiling Point: | >100°C |
| Odour And Appearance: | Clear, odourless | Freezing Point: | Not Applicable |
| Odour Threshold: | Not Available | Melting Point: | <-35°C |
| Vapour Pressure: | Not Available | pH: | 9-10 |
| Vapour Density: | Not Determined | Solubility: | 100 % |
| Evaporation Rate: | Not Available | % Volatile By Volume: | Not Available |
| Coeff Of Water To Oil Distribution: | Not Applicable | Specific Gravity: | 1.07 |

SECTION 4 - FIRE AND EXPLOSION DATA

Conditions Of Flammability: Does not burn or support combustion.
Flashpoint: >100°C
Lower Flammable Limit: Not Applicable
Upper Flammable Limit: Not Applicable

SECTION 4 - FIRE AND EXPLOSION DATA (continued)

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| Auto Ignition Temperature: | Not Applicable |
| Means Of Extinction: | Dry chemical, carbon dioxide, foam, water |
| Hazardous Combustion Products: | CO, CO ₂ , oxides of nitrogen |
| Sensitivity To Impact / Static Discharge: | None known |
| Special Firefighting Procedures: | Firefighters must wear appropriate breathing apparatus and clothing. |

Fire Comment:

SECTION 5 - REACTIVITY DATA

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| Chemically Stable?: | Yes |
| Conditions Of Chemical Instability: | |
| Incompatible Substances: | Strong oxidizing agents. |
| Conditions Of Reactivity: | None Known |
| Hazardous Decomposition Products: | Carbon dioxide, carbon monoxide, oxides of nitrogen. |
| Hazardous Polymerization: | |

SECTION 6 - TOXICOLOGICAL PROPERTIES

| Routes Of Entry: | Skin | Skin Absorption | Eye Contact | Inhalation | Ingestion |
|--------------------------------------|--|-----------------|-------------|------------|-----------|
| | .. | .. | p | p | p |
| Skin Irritation: | Prolonged exposure may cause irritation. | | | | |
| Eye Irritation: | May cause slight irritation and/or redness. | | | | |
| Inhalation Irritation: | May cause some respiratory irritation. | | | | |
| Ingestion Irritation: | May cause nausea and vomiting. | | | | |
| General Irritancy Of Product: | Mild | | | | |
| Exposure Limits: | 4 hour LC ₅₀ (rat)= >3200 mg/m ³ , LD ₅₀ (rabbit)= 3700 mgg/kg, LD ₅₀ (rat)= 2290 mg/kg all based on components. | | | | |
| Effects Of Acute Exposure: | Not Determined | | | | |
| Effects Of Chronic Exposure: | Prolonged contact with skin may cause burning. | | | | |
| Sensitization To Product: | Not known as a sensitizer. | | | | |
| Carcinogenicity: | Not considered to be a carcinogenic as IARC, NTP, and OSHA. | | | | |
| Teratogenicity: | Not known as a teratogen. | | | | |
| Reproductive Toxicity: | None known | | | | |
| Mutagenicity: | Not a known mutagen. | | | | |
| Synergistic Products: | None known. | | | | |

SECTION 7 - PREVENTIVE MEASURES

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| Personal Protection: | Chemical resistant clothing is recommended including glove, apron and goggles. |
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SECTION 7 - PREVENTIVE MEASURES (continued)

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| Respirator: | Use of an approved organic vapour type respirator is advised. |
| Engineering Controls / Work Practices: | Provide mechanical ventilation to prevent dust concentrations, and to reduce potential exposure. |
| Storage Requirements: | Store in a cool, dry, well ventilated place. Keep container tightly closed and away from incompatible materials. |
| Special Shipping Requirements: | No special requirements. |
| Leak And Spill Procedures: | Use appropriate safety equipment. Soak up spill with absorbent material and put in appropriate containers for disposal. Do not allow to enter waterways. |
| Waste Disposal: | All waste should be disposed of according to Federal, Provincial and local regulations. It is the responsibility of the end user to determine if material meets criteria for hazardous waste at the time of disposal. Containers should NOT be reused. Containers should be disposed of in accordance with government regulations. |
| Handling Procedures And Equipment: | Avoid ingestion. Practice reasonable caution and personal cleanliness. Avoid skin and eye contact. |

SECTION 8 - FIRST AID MEASURES / OTHER HAZARDOUS INFO

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| Specific Measures: | |
| Skin First Aid: | Wash with soap and water. If adverse symptoms develop, seek medical attention. |
| Eye First Aid: | Flush eyes with water for at least 15 minutes. If adverse symptoms develop, seek medical attention. |
| Inhalation First Aid: | Remove victim to fresh air. If breathing has stopped administer CPR and seek medical attention. |
| Induce Vomiting?: | No |
| Ingestion First Aid: | If conscious give 2 to 4 glasses of water to drink, but DO NOT induce vomiting. Get medical attention. Do not give anything by mouth to an unconscious or convulsing person. |

SECTION 9 - PREPARATION INFORMATION

Prepared By: Bri-Chem Supply Ltd. - Product Safety Committee

Phone: (780) 455-8667

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