

Potassium Formate

Date of Preparation: April 12, 2019

Section 1: IDENTIFICATION

Product Name: Potassium Formate

Synonyms: Not available.

Product Use: Drilling Fluid.

Restrictions on Use: Not available.

Manufacturer/Supplier: Tiger Calcium Services

603-15 Ave

Nisku, AB T9E 7M6

Phone Number: 780-849-3114

Emergency Phone: Canutec: 613-996-6666

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Section 2: HAZARD(S) IDENTIFICATION

GHS INFORMATION

Classification: Not hazardous according to OSHA criteria (29 CFR 1910.1200).

Not hazardous according to WHMIS 2015 criteria.

LABEL ELEMENTS

Hazard None.

Pictogram(s):

Signal Word: None.

Hazard Not applicable.

Statements:

Precautionary Statements

Prevention: Not applicable.Response: Not applicable.Storage: Not applicable.Disposal: Not applicable.

Hazards Not Otherwise Classified: Not applicable.

Ingredients with Unknown Toxicity: None.

This material is not considered hazardous by the OSHA Hazard Communication Standard, (29 CFR 1910.1200).

This material is not considered hazardous by the Hazardous Products Regulations.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS			
Ingredient(s)	Common name / Synonyms	CAS No.	% wt./wt.
Formic acid, potassium salt (1:1)	Potassium formate	590-29-4	~ 75

Section 4: FIRST-AID MEASURES



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Inhalation: If inhaled: Call a poison center or doctor if you feel unwell.

Acute and delayed symptoms and effects: May cause respiratory irritation.

Signs/symptoms may include cough, sneezing, nasal discharge,

headache, hoarseness, and nose and throat pain.

Eye Contact: If in eyes: Rinse cautiously with water for at least 15 minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. Call a poison

center or doctor if you feel unwell.

Acute and delayed symptoms and effects: May cause eye irritation.

Signs/symptoms may include redness, swelling, pain, tearing, and blurred

or hazy vision.

Skin Contact: If on skin: Wash with plenty of water. Call a poison center or doctor if you

feel unwell.

Acute and delayed symptoms and effects: May cause skin irritation. Signs/symptoms may include localized redness, swelling, and itching.

Ingestion: If swallowed: Call a poison center or doctor if you feel unwell. If vomiting

occurs naturally, have victim lean forward to reduce the risk of aspiration. Do NOT induce vomiting unless directed to do so by medical personnel.

Never give anything by mouth to an unconscious person.

Acute and delayed symptoms and effects: May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset,

nausea, vomiting and diarrhea.

General Advice: In case of accident or if you feel unwell, seek medical advice immediately

(show the label or SDS where possible).

Note to Physicians: Symptoms may not appear immediately.

Section 5: FIRE-FIGHTING MEASURES

FLAMMABILITY AND EXPLOSION INFORMATION

Not flammable or combustible by OSHA/WHMIS criteria.

Sensitivity to Mechanical Impact: This material is not sensitive to mechanical impact. **Sensitivity to Static Discharge**: This material is not sensitive to static discharge.

MEANS OF EXTINCTION

Suitable Extinguishing Media: Small Fire: Dry chemical, CO2, water spray or regular foam.

Large Fire: Water spray, fog or regular foam. Move containers from fire area if you can do it without risk.

Unsuitable Extinguishing Media: Not available.

Products of Combustion: Oxides of carbon. Potassium oxide.

Protection of Firefighters: Fire may produce irritating, corrosive and/or toxic gases.

Runoff from fire control or dilution water may cause pollution. Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only

provide limited protection.

Section 6: ACCIDENTAL RELEASE MEASURES



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Emergency Procedures: Keep unauthorized personnel away. Stay upwind. Keep out of low

areas. Ventilate closed spaces before entering.

Personal Precautions: Do not touch or walk through spilled material. Use personal

protection recommended in Section 8.

Environmental Precautions: Keep out of drains, sewers, ditches, and waterways.

Methods for Containment: Stop leak if without risk. Do not flush to sewer or allow to enter

waterways.

Methods for Clean-Up: Absorb or cover with dry earth, sand or other non-combustible

material and transfer to containers.

Other Information: See Section 13 for disposal considerations.

Section 7: HANDLING AND STORAGE

Handling:

Do not swallow. Wash thoroughly after handling. See Section 8 for information on Personal Protective Equipment.

Storage:

Store away from incompatible materials. See Section 10 for information on Incompatible Materials. Keep out of the reach of children.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines Component

Potassium formate [CAS No. 590-29-4]

ACGIH: No TLV established. **OSHA:** No PEL established.

PEL: Permissible Exposure Limit **TLV:** Threshold Limit Value

Engineering Controls: Not normally required.

PERSONAL PROTECTIVE EQUIPMENT (PPE)



Eye/Face Protection: Safety glasses are recommended. Use equipment for eye

protection that meets the standards referenced by CSA Standard CAN/CSA-Z94.3-92 and OSHA regulations in 29

CFR 1910.133 for Personal Protective Equipment.

Hand Protection: Wear protective gloves. Consult manufacturer specifications

for further information.

Skin and Body Protection: Wear protective clothing.

Respiratory Protection: Not required under normal use conditions.



SAFETY DATA SHEET

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General Hygiene Considerations: Handle according to established industrial hygiene and

safety practices. Consult a competent industrial hygienist to determine hazard potential and/or the PPE manufacturers to

ensure adequate protection.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Colourless liquid.

Colour: Colourless.
Odour: Odourless.

Odour Threshold: Not available.

Physical State: Liquid.

pH: Not available.Melting Point / Freezing Not available.

Point:

Initial Boiling Point: 135 °C (275 °F)

Boiling Range: 135 to 153 °C (275 to 307.4 °F)

Flash Point: $> 100 \,^{\circ}\text{C} (212 \,^{\circ}\text{F})$

Evaporation Rate: Not available.

Flammability (solid, gas): Not applicable.

Lower Flammability Limit: Not available.

Upper Flammability Limit: Not available.

Vapor Pressure: Not available.

Vapor Density: Not available.

Relative Density: Not available.

Solubilities: Completely soluble in water (> 1000 mg/L).

Partition Coefficient: n-

Octanol/Water:

Not available.

Auto-ignition Temperature: Not available.

Decomposition Not available.

Temperature:

inol available.

Viscosity: Not available.

Percent Volatile, wt. %: Not available.

VOC content, wt. %: Not available.

Density: 1.48 to 1.58 g/cm³

Coefficient of Water/Oil

Distribution:

Not available.

Section 10: STABILITY AND REACTIVITY



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Reactivity: Contact with incompatible materials. Exposure to heat.

Chemical Stability: Stable under normal storage conditions.

Possibility of Hazardous

Reactions:

None known.

Conditions to Avoid: Contact with incompatible materials. Exposure to heat.

Incompatible Materials: Strong acids. Strong oxidizers.

Hazardous Decomposition Products: Not available.

Section 11: TOXICOLOGICAL INFORMATION

EFFECTS OF ACUTE EXPOSURE

Product Toxicity

Oral: Not available.

Dermal: Not available.

Inhalation: Not available.

Component Toxicity

Component CAS No. LD50 oral LD50 dermal LC50

Potassium formate 590-29-4 5500 mg/kg (mouse) Not available. Not available.

Likely Routes of Exposure: Eye contact. Skin contact. Inhalation. Ingestion.

Target Organs: Skin. Eyes. Gastrointestinal tract. Respiratory system.

Symptoms (including delayed and immediate effects)

Inhalation: May cause respiratory irritation. Signs/symptoms may include cough, sneezing,

nasal discharge, headache, hoarseness, and nose and throat pain.

Eye: May cause eye irritation. Signs/symptoms may include redness, swelling, pain,

tearing, and blurred or hazy vision.

Skin: May cause skin irritation. Signs/symptoms may include localized redness, swelling,

and itching.

Ingestion: May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain.

stomach upset, nausea, vomiting and diarrhea.

Skin Sensitization: Not available.

Respiratory Sensitization: Not available.

Medical Conditions Not available.

Aggravated By Exposure:

EFFECTS OF CHRONIC EXPOSURE (from short and long-term exposure)

Target Organs: Skin. Eyes. Gastrointestinal tract. Respiratory system.

Chronic Effects: Prolonged or repeated contact may dry skin and cause irritation.

Carcinogenicity: This product does not contain any carcinogens or potential



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carcinogens above reportable thresholds as listed by ACGIH, IARC,

OSHA, or NTP.

Mutagenicity: Not available.

Reproductive Effects: Not available.

Developmental Effects

Teratogenicity: Not available. **Embryotoxicity:** Not available.

Toxicologically Synergistic Materials: Not available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Not available.

Persistence / Degradability: Not available.

Bioaccumulation / Accumulation: Not available.

Mobility in Environment: Not available.

Other Adverse Effects: Not available.

Section 13: DISPOSAL CONSIDERATIONS

Disposal Instructions: Disposal should be in accordance with applicable regional, national

and local laws and regulations. Local regulations may be more

stringent than regional or national requirements.

Section 14: TRANSPORT INFORMATION

U.S. Department of Transportation (DOT)

Proper Shipping Name: Not regulated.

Class: Not applicable.

UN Number: Not applicable.

Packing Group: Not applicable.

Label Code: Not applicable.

Canada Transportation of Dangerous Goods (TDG) Proper Shipping Name: Not regulated.

Proper Shipping Name: Not regulated.

Class: Not applicable.

UN Number: Not applicable.

Packing Group: Not applicable.

Label Code: Not applicable.

Section 15: REGULATORY INFORMATION



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SAFETY DATA SHEET Chemical Inventories

US (TSCA)

The components of this product are in compliance with the chemical notification requirements of TSCA.

Canada (DSL)

The components of this product are in compliance with the chemical notification requirements of the NSN Regulations under CEPA, 1999.

Federal Regulations

United States

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SARA Title III

No components are listed.

State Regulations

Massachusetts

US Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

No components are listed.

New Jersey

US New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

No components are listed.

Pennsylvania

US Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

No components are listed.

California

California Prop 65: This product does not contain chemicals known to the State of California

to cause cancer, birth defects or other reproductive harm.

Section 16: OTHER INFORMATION

Disclaimer:



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The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for their own particular use.

Date of Preparation of SDS: April 12, 2019

Version: 1.0

GHS SDS Prepared by: Deerfoot Consulting Inc.

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