

Date of Preparation: March 9, 2018

Section 1: IDENTIFICATION

Product Name: BC Produced Water, Sweet, Non-Regulated

Synonyms: Not available.

Product Use: Waste stream.

Restrictions on Use: Not available.

Manufacturer/Supplier: Crew Energy Inc.

Suite 800, 250 - 5th Street SW Calgary, Alberta T2P 0R4

Phone Number: (403) 266-2088 Emergency Phone: (403) 266-2088

Canutec: (613) 996-6666 or Cellular *666

Date of Preparation of SDS: March 9, 2018

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.



Date of Preparation: March 9, 2018

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient(s) Common name / CAS No. % wt./wt.

Synonyms

 Water
 Not available.
 7732-18-5
 90 - 100

 Petroleum
 Not available.
 8002-05-9
 < 0.1</td>

Section 4: FIRST-AID MEASURES

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 based on 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: Use appropriate extinguishing media for surrounding fire.

Unsuitable Extinguishing Media: Not available.



SAFETY DATA SHEET Date of Preparation: March 9, 2018

Products of Combustion: Oxides of carbon. Aldehydes.

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

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

Water [CAS No. 7732-18-5]

ACGIH: No TLV established.
OSHA: No PEL established.
Petroleum [CAS No. 8002-05-9]

ACGIH: No TLV established.

OSHA: 500 ppm (TWA), 2000 mg/m³ (TWA);

400 ppm (TWA) [Vacated];

PEL: Permissible Exposure Limit **TLV:** Threshold Limit Value **TWA:** Time-Weighted Average



Date of Preparation: March 9, 2018

Engineering Controls: Use ventilation adequate to keep exposures (airborne levels

of dust, fume, vapour, gas, etc.) below recommended

exposure limits.

PERSONAL PROTECTIVE EQUIPMENT (PPE)



Eye/Face Protection: Wear safety glasses. 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: If engineering controls and ventilation are not sufficient to

control exposure to below the allowable limits then an appropriate NIOSH/MSHA approved air-purifying respirator that meets the requirements of CSA Standard CAN/CSA-Z94.4-11, or self-contained breathing apparatus must be used. Supplied air breathing apparatus must be used when oxygen concentrations are low or if airborne concentrations

exceed the limits of the air-purifying respirators.

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: Clear to grey liquid.

Colour: Colourless to grey.

Odourless or slight hydrocarbon.

Odour Threshold: Not available.

Physical State: Liquid. pH: 5 to 8

Melting Point / Freezing 0 °C (32 °F) (Water)

Point:

Initial Boiling Point: Not available.

Boiling Range: 100 °C (212 °F) (Water)

Flash Point: Not available.

Evaporation Rate: Not available.



SAFETY DATA SHEET

BC Produced Water, Sweet, Non-Regulated

Date of Preparation: March 9, 2018

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: 1.079 to 1.185 (Water = 1) at 25 °C (77 °F)

Soluble in water.

Partition Coefficient: n-

Octanol/Water:

Not available.

Auto-ignition Temperature: Not available.

Decomposition

Temperature:

Not available.

Viscosity:Not available.Percent Volatile, wt. %:Not available.VOC content, wt. %:Not available.Density:Not available.

Coefficient of Water/Oil Distribution:

Not available.

Section 10: STABILITY AND REACTIVITY

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 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.



Date of Preparation: March 9, 2018

Component Toxicity

Component CAS No. LD50 oral LD50 dermal LC50

Water 7732-18-5 > 90 mL/kg (rat) Not available. Not available. Petroleum 8002-05-9 4300 mg/kg (rat) 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.

Repeated dermal application of crude oils in rats produced systemic

toxicity in blood, liver, thymus and bone marrow.

Carcinogenicity: Product is not classified as a carcinogen. See Component

Carcinogenicity table below for information on individual components. Lifetime skin painting studies in animals with whole crude oils and crude oil fractions have produced tumours in animals following

prolonged and repeated skin contact.

Component Carcinogenicity

ComponentACGIHIARCNTPOSHAProp 65PetroleumNot listed.Group 3Not listed.OSHA Carcinogen.Not listed.

Mutagenicity: Not available.

Reproductive Effects: Studies exist which report a link to crude oil and reproductive effects

including menstrual disorders.

Teratogenicity: Not available.

Embryotoxicity: Repeated dermal application of crude oils to pregnant rats produced

maternal toxicity and fetal developmental toxicity and fetal tumours.

Toxicologically Synergistic Materials: Not available.



Date of Preparation: March 9, 2018

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.

Class: Not applicable.

UN Number: Not applicable.

Packing Group: Not applicable.

Label Code: Not applicable.

Section 15: REGULATORY INFORMATION

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.



Date of Preparation: March 9, 2018

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)

ComponentCAS No.RTK ListPetroleum8002-05-9Listed.

New Jersey

US New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated

Section 34:5A-5)

ComponentCAS No.RTK ListPetroleum8002-05-9SHHS

Note: SHHS = Special Health Hazard Substance

Pennsylvania

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

Component

CAS No.

RTK List

Petroleum

8002-05-9

Listed.

California

California Prop 65:

WARNING This product can expose you to chemicals including n-Hexane, Toluene, Benzene, Ethylbenzene, and Polycyclic Aromatic Hydrocarbons which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Section 16: OTHER INFORMATION

Disclaimer:

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: March 9, 2018

Version: 1.0

GHS SDS Prepared by: Deerfoot Consulting Inc.

Phone: (403) 720-3700