

# Safety Data Sheet

HC-10

## SECTION I - IDENTIFICATION



Greenwell Energy Solutions  
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Chemtrec :..... (800) 424-9300

**Product Number** HC-10  
**Product Name** HC-10  
**Chemical Family** Organic Phosphate Complex  
**CAS Number** Multiple  
**Date Prepared** 4/28/2016  
**Revision Number**  
**Recommended Use** For Industrial Use Only

## SECTION II - HAZARDOUS IDENTIFICATION

### GHS CLASSIFICATION:

#### Classification

Acute Toxicity, Oral	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2B
Acute Toxicity, Inhalation	Category 4

### WARNING!

#### GHS LABEL:



#### Hazard Statements

H302	Harmful if swallowed
H315	Causes skin irritation
H320	Causes eye irritation
H332	Harmful if inhaled

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## Precautionary Statements

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash... thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated are.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302+352	IF ON SKIN: Wash with plenty of water/...
p304+340	IF INHALED: Remove victim to fresh air and keep comfortable for breathing.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so - continue rinsing.
P312	Call a POISON CENTER or a doctor/physician if you feel unwell.
P321	Specific treatment (see ... on this label).
P330	Rinse mouth.
P332+313	If skin irritation occurs: get medical advice/attention.
P337+313	If eye irritation persists get medical advice/attention.
P362+364	Take off immediatley all contaminated clothing and wash it before reuse.
P501	Dispose of contents/container to...

## **SECTION III - COMPOSITION/INFORMATION ON INGREDIENTS**

The precise composition of this product is proprietary information. In the event of a medical emergency, a complete disclosure will be provided to medical personnel.

Component Name	CAS #	Component%	OSHA PEL	ACGIH TLV
Monoethylene Glycol	107-21-1	4-6%	Not Established	100 mg/m3
Caustic Potash, 45%	1310-58-3	0.5-2%	2 mg/m <sup>3</sup> , Ceiling	2 mg/m <sup>3</sup> , Ceiling

## **SECTION IV - FIRST AID MEASURES**

**Contact with eyes:** Flush with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing Seek immediate medical attention.

**Skin contact:** Wash exposed areas with water and mild soap. Remove contaminated clothing immediately and launder before reuse. If irritations persist, seek immediate medical attention.

**Inhalation:** Remove victim to fresh air. Administer oxygen or artificial respiration if breathing is affected or stopped. Seek immediate medical attention.

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**Ingestion:** If SWALLOWED: Call a poison control center immediately. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting without medical advice. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical advice.

## SECTION V - FIREFIGHTING MEASURES

**Suitable Extinguishing Media:** Alcohol resistant foam, carbon dioxide, regular dry chemical, water  
Do not use a direct stream of water. Product will float and can be reignited on surface of water.

**Special Fire Fighting Procedures** Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Firefighters' protective clothing will provide limited protection.

**Unusual Fire Fighting Hazards:** SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO<sub>2</sub>, water spray, firefighting foam, or Halon.  
LARGE FIRES: Water spray, fog or firefighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.

## SECTION VI - ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. Keep out of low areas. Ensure adequate ventilation. Ventilate closed spaces before entering them.

**Environmental Precautions:** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

**Methods for Cleaning Up:** Small Spill: Clean up with shovel and broom. Move other containers from spill area. Absorb spill material with an inert absorbent. Use spark proof tools while working in spill area. Contaminated absorbent material may pose same hazards as the spilled product. Dispose of any materials using approved disposal methods. Contact Greenwell Environmental Affairs after area is secure.  
Large Spill: Move other containers from spill area. Absorb spill material with an inert absorbent. Approach area from upwind. Dike spill area and do not allow spilled material to reach water systems or drainage systems. Use spark proof tools while working in spill area. Dispose of any materials using approved disposal methods. Contaminated absorbent material may pose same hazards as the spilled product. Contact Greenwell Environmental Affairs after area is secure.

## SECTION VII - HANDLING AND STORAGE

**Handling and Storage:**

- Avoid prolonged breathing of mist or vapor. Wash thoroughly after handling. Vent container carefully before opening. Bond and ground all equipment when transferring from one vessel to another. The use of explosion-proof equipment is recommended. "Empty" containers retain

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residue and/or vapor and may be dangerous. Do not cut, weld, braze solder, drill, grind or expose such containers to heat, flames, sparks, or other ignition sources. Keep containers tightly closed when not in use.

### SECTION VIII - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

#### EXPOSURE LIMITS:

Component Name	CAS #	OSHA PEL	ACGIH TLV
Monoethylene Glycol	107-21-1	Not Established	100 mg/m <sup>3</sup>
Caustic Potash, 45%	1310-58-3	2 mg/m <sup>3</sup> , Ceiling	2 mg/m <sup>3</sup> , Ceiling

**Engineering Controls:** Ensure adequate ventilation, especially in confined areas. Eye wash fountain and emergency showers are recommended.

**Monitoring:** Emergency eye wash capability should be available in the near proximity to operations presenting a potential splash exposure. Use good personal hygiene practices. Avoid repeated and/or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove contaminated clothing and laundry before reuse. Use care when laundering to prevent the formation of flammable vapors which could ignite via washer or dryer. Consider the need to discard contaminated leather shoes and gloves.

#### Personal Protective Equipment (PPE)

**Eye Protection:** Goggles or approved OSHA device with side shields; do not wear contact lenses when handling this product.

**Skin Protection:** Gloves constructed of nitrile or neoprene are recommended. Other chemical resistant gloves are acceptable.  
If needed to prevent skin contact, chemical protective clothing such as of DuPont TyChem<sup>®</sup>, Saranex or equivalent recommended based on degree of exposure. The resistance of specific material may vary from product to product as well as with degree of exposure

**Respiratory Protection:** Use a NIOSH-approved respirator as required to prevent overexposure. In accord with 29 CFR 1910.134, Use either a full-face, atmosphere-supplying respirator or an air-purifying respirator

### SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

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<b>Appearance</b>	Clear to light yellow liquid
<b>Odor</b>	Not Available
<b>pH@25°C</b>	8.5 to 9.0
<b>Melting/Freezing Point</b>	Not Available
<b>Flashpoint</b>	>200°F
<b>Specific Gravity</b>	1.05 or 483 lbs. per 55 gallon drum
<b>Solubility</b>	Water Soluble
<b>Auto-Ignition Temperature</b>	Not Available
<b>Decomposition Temperature</b>	Not Available
<b>VOC Content</b>	Not Available
<b>Odor Threshold</b>	Not Available
<b>Boiling Range</b>	Not Available
<b>Evaporation Point</b>	Not Available
<b>Flammable Limits - Upper</b>	Not Available
<b>Flammable Limits - Lower</b>	Not Available
<b>Vapor Pressure</b>	Not Available
<b>Vapor Density (Air=1)</b>	Not Available
<b>Viscosity</b>	Not Available

### SECTION X - STABILITY AND REACTIVITY

<b>Stability:</b>	Stable, under normal conditions of storage and handling.
<b>Conditions to Avoid:</b>	Not flammable in the presence of the following materials or conditions: open flames, sparks, static discharge and heat.
<b>Hazardous Decomposition/Byproducts:</b>	Carbon monoxide, Carbon dioxide Noncombusted Hydrocarbons
<b>Hazardous Polymerization:</b>	Will not occur.
<b>Polymerization Conditions to Avoid:</b>	None
<b>Incompatibilities:</b>	Can react with strong oxidizing agents, peroxides, alkaline products and strong acids. Contact with amines, ammonia, and some metals can create hazards. Avoid contact with Aluminum and Copper. Mildly corrosive to carbon steel.

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## SECTION XI - TOXICOLOGICAL INFORMATION

**Likely Route of Exposure:** Contact and inhalation; ingestion possible.

**Inhalation:** Inhalation is not expected unless small particulates or heated to high temperatures. Inhalation of concentrations over 50 ppm can produce headache, lassitude, weariness, dizziness, drowsiness, over excitation. Exposure to very high levels can result in unconsciousness and death. Repeated over-exposure may cause liver and kidney injuries. Components of the product may affect the nervous system. Exposure to light hydrocarbons has been associated in animal studies with effects to the central and peripheral nervous systems, liver, and kidneys. The significance of these animal models to predict similar human response to gasoline is uncertain.

**Eye Contact:** Causes eye irritation including stinging, watering and redness which may result in corneal injury.

**Skin Contact:** Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash). Do not get this material in contact with skin.

**Ingestion:** Aspiration hazard. Can enter the lungs during swallowing or vomiting and cause chemical pneumonia and edema. Ingestion of liquid will cause gastrointestinal distress, irritation, possibly nausea, and can be fatal.

**Acute Toxicity Value:** Irritating to eyes and skin

**Chronic (Long Term) Effects:** See Health Hazards above.

### Toxicity:

Component Name	LD50	LC50
Monoethylene Glycol	Oral, mouse 5500 mg/kg; Oral, rat 4700 mg/kg; Dermal, rabbit	Inhalation, rat 10876 mg/kg
Caustic Potash, 45%	Oral - Rat - 333 mg/kg	Not Established

**Reproductive Effects** Not Applicable

**Teratogenicity** Not Applicable

**Mutagenicity** Not Applicable

**Embryotoxicity** Not Applicable

**Sensitization to Product** Not Applicable

**Synergistic Products** Not Applicable

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**Carcinogenicity** Not listed as a Carcinogen

## SECTION XII - ECOLOGICAL INFORMATION

**Ecotoxicity:** This chemical is not listed as toxic to aquatic organisms, however, does contain substances dangerous for the environment. Use care to not allow the chemical into any water way. May cause long-term adverse effects in the aquatic environment.

**Mobility:** Mobile in soil

**Degradability:** Readily biodegradable

**BioAccumulation:** This material is not expected to significantly bio accumulate.

## SECTION XIII - WASTE DISPOSAL CONSIDERATIONS

The generation of waste should be avoided and minimized at all times. Empty containers may contain a residue of this product. Processing, use or contamination of the product may change the waste management options. Must not be disposed of together with household garbage. Any unused product should be handled as hazardous waste and sent to a RCRA approved incinerator or disposed in a RCRA approved waste facility.

## SECTION XIV - TRANSPORT INFORMATION

### DOT SHIPPING INFORMATION

**Proper Shipping Name:** Not Regulated

**Contains:**

**Hazard Class and Label:**

**Identification Number:**

**Packaging Group:**

**Other Shipping Info:** In Bulk Shipments or non-ground shipments in excess of RQ (33,000 lbs or 3,875 gallons): UN 3082, n.o.s., 9, PG III (Ethylene Glycol) ERG 171.

## SECTION XV - REGULATORY INFORMATION

**TSCA STATUS:**..... The components of this product are listed on the TSCA Inventory

**SARA TITLE III SECTION 302/304 EXTREMELY HAZARDOUS SUBSTANCE:**

No chemicals in this material are subject to the reporting requirements.

**SARA TITLE III SECTION 311/312 HAZARD CATEGORIZATION:**

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Acute	Chronic	Fire	Pressure	Reactive
X				

## SARA TITLE III SECTION 313 SUPPLIER INFORMATION:

Component Name	CAS #	% by wt.
Ethylene Glycol	107-21-1	
	1310-58-3	0.5-2%

## CERCLA SECTION 102(a) HAZARDOUS SUBSTANCE:

Component Name	CAS #	% by wt.	RQ (lbs.)
Potassium Hydroxide	1310-58-3	0.5-2%	1,000

## CALIFORNIA PROPOSITION 65:

No chemicals in this material are subject to the reporting requirements.

## SECTION XVI - OTHER INFORMATION

HMIS Health: ..... 2

HMIS Flammability: ..... 0

HMIS Reactivity: ..... 0

**Additional:** The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.