



Heartland Energy Group LTD.
PO Box 543
Grain Valley MO 64029
1.877.797.2811

SAFETY DATA SHEET

I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product: Phix XIV®
General Description: Non Hazardous Organic Compound
Revision Date: 1/1/2022
REACH Registration: The component in this product has been
Registered according to Article 2 REACH Regulation (EC) No. 1907/2008

| HMIS Rating | |
|---------------------|---|
| Health | 0 |
| Fire | 0 |
| Reactivity | 0 |
| Personal Protection | A |

Rating Scale

4 = Extreme
3 = High
2 = Moderate
1 = Slight
0 = Insignificant

For General Information call: 1-877-797-2811

For Chemical Emergency ONLY (spill, leak, fire, exposure or accident), call
CHEMTREC at 1-800-424-9300

II. HAZARD INFORMATION

GHS Classification of the substance or mixture

Acute Toxicity-Oral: Category 5
Skin Corrosion/Irritation: Category 3
Serious Eye Damage/Eye Irritation: Category 2B

GHS Label Elements

Signal Word: **Warning**
Symbols: **Not Applicable**

Hazard Statements: **May be harmful if swallowed**
Causes mild skin irritation
Causes eye irritation

Hazards not otherwise classified (HNOC) or not covered by GHS-Not Applicable

Other Information: May cause mild skin irritation if not rinsed off with soap and water
May cause eye irritation if not rinsed out with copious amounts of water

III. COMPOSITION/INFORMATION ON INGREDIENTS

| | |
|-------------|----------------------------------|
| CAS# | Chemical Formula |
| N/A | Proprietary/Trade Secret Claimed |

Substances

The identity of this material is a trade secret (29 CFR 1910.1200(i)) and is available to any attending physician, paramedical personnel and/or spill response personnel in the case of an emergency. Proprietary ingredient is non-toxic.

There are no additional ingredients present which, within the current knowledge of the manufacturer and in the concentrations applicable, classified as hazardous to the health or environment thus do not require reporting in this section.

Mixtures

Not applicable

EMERGENCY OVERVIEW

Potential Health Effects

Eye: May cause eye irritation.

Skin: May cause skin irritation. Low hazard for usual industrial handling.

Ingestion: Ingestion of large amounts may cause gastrointestinal irritation. Low hazard for usual industrial handling.

Inhalation: May cause respiratory tract irritation. Low hazard for usual industrial handling.

Chronic: No information found.

IV. FIRST-AID MEASURES

EYES: Flush with water for at least 15 minutes while holding eyelids open. Call a physician if irritation persists. If worn, remove contacts after first 5 minutes.

SKIN: Remove contaminated clothing. Wash exposed area with soap and water for at least 15 minutes. Launder clothes before reuse. Call a physician if rash or other symptoms develop.

INGESTION: If ingested, may cause loose stools. Drink plenty (2-3 glasses) of water and immediately consult a physician. Do not induce vomiting.

INHALATION: Remove to fresh air, if symptoms persist, seek medical attention.

V. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

Product does not support combustion, use extinguishing agent for type of surrounding fire.

Special hazards arising from the substance or mixture

No data available

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary

Further information

No data available

VI. ACCIDENTAL RELEASE MEASURES

Personal precautions Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Methods for containment: Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up: Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labeled containers. Prevent large spills from entering sewers or waterways. Never return spills in original containers for re-use. Product can be neutralized with water or acetic acid in accordance to local, state and federal regulations. Always sample spill and calculate via titration the proper amount of neutralizing material to be used to properly neutralize.

VII. HANDLING AND STORAGE

General Handling and Storage Precautions: As with all chemical products and material, take care as to where and how you store them.

Shelf Life: No known limit. Recommended: Use within 1 year.

Special Sensitivity: None

Storage and other Precautions: For increased shelf life keep in a closed container away from incompatible materials.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: Not normally required.

Ventilation: Normal ventilation is generally adequate.

Protective Equipment: As with any chemical, care should be taken as not to get anything in the eyes. Safety glasses or goggles are suggested for use.

IX. PHYSICAL AND CHEMICAL PROPERTIES

Properties Evaluated @ Ambient Temperature

Appearance: Colorless Liquid

Odor: Odorless

Specific Gravity: 1.32 ± 0.04

Initial Freeze Point: -10°F (-23°C)

Initial Boiling Point: 234°F (112°C)

Flash Point: N/A

Solubility: Complete/100%

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

X. STABILITY AND REACTIVITY

Reactivity

This material is considered to be non-reactive under normal conditions of use.

Chemical stability

Stable under recommended storage conditions

Possibility of hazardous reactions

No data available

Conditions to avoid

No data available

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Other decomposition products -no data available

In the event of fire, see section 5

XI. TOXICOLOGICAL INFORMATION

LD50:

Oral, rat: LD50 = 2051 mg/kg;

Carcinogenicity:

Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information available.

Teratogenicity: No information available.

Reproductive Effects: No information available.

Mutagenicity: No information available.

Neurotoxicity: No information available.

Other Studies: N/A

XII. ECOLOGICAL INFORMATION

Ecological Studies:

Test Procedure: Hach Reactor Digestion method for Waste Water and Sea Water. Hach Reactor Digestion Method is a semi-micro adaptation of the Standard Methods.

Test Results Conclude Phix XIV® was found to be 100% Biodegradable
COD = 9,800 ml/L, BOD = 120 mg/L @ 5 days and 155 mg/L @ 10 days

XIII. DISPOSAL CONSIDERATIONS

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

XIV. TRANSPORT INFORMATION

The proper shipping name and/or hazard class for this product may vary according to packaging, properties and mode of transportation. Typical proper shipping names for this product are:

US Department of Transportation (DOT): Non-Regulated as a Hazardous Material

Canadian TDG (Transportation of Dangerous Goods): UN 1760, Corrosive Liquid, N.O.S., (Synthetic Acid), Class 8, PG III (by Aluminum Corrosion Only) Note: The original manufacturer, formulator and/or blender has determined this product to be corrosive to Aluminum as per TDG criteria, standards and/or regulations, >6.25 mm/year at 55C.

IMO (Water Transportation): Not Regulated as a Hazardous Material

IATA (Air Transportation): Not Regulated as a Hazardous Material

Rail: Not Evaluated

XV. REGULATORY INFORMATION

US FEDERAL

TSCA

All of the chemicals are listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

Section 313 No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

This chemical is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations**European Labeling in Accordance with EC Directives****Hazard Symbols:**

Not available.

Risk Phrases:

None Known

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

None Known

Canada - DSL/NDSL

This product is listed on Canada's DSL List.

Canada - WHMIS

WHMIS: Class E – by aluminum corrosion only.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List - Phix XIV® contains no reportable ingredients as per the National Pollutant Release Inventory substance lists.

| |
|-------------------------------|
| XVI. OTHER INFORMATION |
|-------------------------------|

The information accumulated herein is believed to be accurate based on the information provided, although no guarantee or warranty, either expressed or implied is made as to the accuracy or completeness of this information, whether originating with this company or not. Recipients are advised to confirm in advance of need that the information is correct, applicable and suitable to their circumstances. The conditions or methods of handling, storage, use and disposal of the product and container are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage or use of this information or product. If the product is used as a component in another product, this information may not be applicable.

End of Safety Data Sheet