



SAFETY DATA SHEET

Issue date 16-May-2016

Revision Date 18-May-2016

Version 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name LEB HpH

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use Oilfield Chemical
Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Supplier

Flotek Chemistry, LLC
1004 S. Plainsman Road
Marlow, OK 73055
Phone +1 (580) 658-6608
Fax +1 (580) 658-3223

CESI Chemical, Holland Branch
Waanderweg 64
7812 HZ, Emmen
The Netherlands
Phone +31 (0) 591-677550

For further information, please contact:

E-mail address information@flotekind.com

1.4. Emergency telephone number

Emergency telephone +1 405-282-8510

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

2.2. Label Elements

Hazard Statements

2.3. Other information

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Additional information

Not hazardous (OSHA 29 CFR 1910.1200)

4. FIRST AID MEASURES**4.1. Description of first aid measures****Eye contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

Skin contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

Ingestion

Call a physician or poison control center immediately. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth.

Inhalation

Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If symptoms persist, call a physician.

Self-Protection of the First Aider

Remove all sources of ignition. Use personal protective equipment as required.

4.2. Most important symptoms and effects, both acute and delayed**4.3. Indication of any immediate medical attention and special treatment needed.****Notes to physician**

Treat symptomatically.

5. FIRE-FIGHTING MEASURES**5.1. Extinguishing media****Suitable Extinguishing Media**

Use CO2, dry chemical, or foam.

Extinguishing media which must not be used for safety reasons

No information available.

5.2. Special hazards arising from the substance or mixture**Special Hazard**

None in particular.

5.3. Advice for firefighters**Special protective equipment for fire-fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment as required.

See section 12 for additional ecological information.

6.2. Environmental precautions

Prevent product from entering drains. Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Dike far ahead of liquid spill for later disposal.

Soak up with inert absorbent material. Clean up promptly by sweeping or vacuum. Keep in suitable, closed containers for disposal. Do not flush into surface water or sanitary sewer system.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation. Do not breathe vapors or spray mist. Keep away from open flames, hot surfaces and sources of ignition. Avoid contact with skin, eyes or clothing. Wear personal protective equipment/face protection. When using do not eat, drink or smoke.

7.2. Conditions for safe storage, including any incompatibilities

Keep in properly labeled containers. Keep containers tightly closed in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure Guidelines Contains no substances with occupational exposure limit values

Exposure limits Contains no substances with occupational exposure limit values

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available

8.2. Exposure controls

Engineering Measures Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Eye Protection

Safety glasses with side-shields. Goggles.

Hand Protection

Impervious gloves.

Skin and body protection

Wear suitable protective clothing.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. When using do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

Environmental Exposure Controls Do not allow material to contaminate ground water system.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State	Liquid	Appearance	clear
Odor	Mild - Musty	Color	amber - brown

<u>Property</u>	<u>Values</u>	<u>Remarks/ Method</u>
pH	7.0-7.5	
Freezing Point	-10 °C / 14 °F	
Boiling point / boiling range		
Flash Point	Not applicable	
Evaporation rate		No data available
Flammability (solid, gas)		No data available
Flammability Limit in Air		No data available
Upper flammability limit		
Lower flammability limit		

Vapor pressure		No data available
Vapor density		No data available
Relative density	1.090-1.110	
Water solubility	completely soluble	
Solubility in other solvents		No data available
Partition coefficient: n-octanol/water		No data available
Autoignition temperature		No data available
Decomposition temperature		No data available
Kinematic viscosity		No data available
Explosive properties	No data available	
Oxidizing Properties	No data available	
Softening point		
Molecular Weight		
VOC content	No data available	
Density Bulk Density	9.10-9.26 lbs/gal	

10. STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization does not occur.

10.4. Conditions to Avoid

Heat, flames and sparks.

10.5. Incompatible Materials

Strong oxidizing agents.

10.6. Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

Product Information

Inhalation May cause irritation.

Eye contact May cause irritation.

Skin contact May cause irritation.

Ingestion May cause irritation.

Chronic toxicity

Carcinogenicity Contains no ingredient listed as a carcinogen >0.1%

Sensitization May cause sensitization of susceptible persons

Reproductive toxicity No information available

Mutagenic effects No information available

Developmental Toxicity	No information available
Teratogenicity	No information available
Target Organ Effects	No information available.

12. ECOLOGICAL INFORMATION

12.1. Toxicity Ecotoxicity

The environmental impact of this product has not been fully investigated.

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available

12.6. Other adverse effects

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues/Unused Products

Dispose of in accordance with local regulations.

Contaminated packaging

Do not reuse empty containers.

EWC Waste Disposal No

According to the European Waste Catalog, Waste Codes are not product specific, but application specific Waste codes should be assigned by the user based on the application for which the product was used

14. TRANSPORT INFORMATION

DOT Not regulated

IMDG/IMO Not regulated

ADR/RID Not regulated

ICAO/IATA Not regulated

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture International Inventories

TSCA	Complies
EINECS/ELINCS	Complies
DSL/NDSL	Complies

PICCS	-
ENCS	-
IECSC	-
AICS	-
KECL	-

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
PICCS - Philippines Inventory of Chemicals and Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
AICS - Australian Inventory of Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances

15.2. Chemical Safety Assessment**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

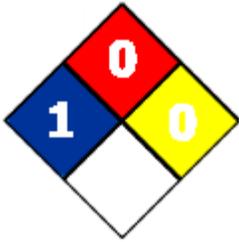
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Canada

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

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazard 1	Flammability 0	Stability 0	Physical and chemical hazards -
<u>HMIS</u>	Health Hazard 1	Flammability 0	Physical Hazard 0	Personal protection -

**Full text of H-Statements referred to under sections 2 and 3**

Prepared By	HSE Department
Issue date	16-May-2016
Revision Date	18-May-2016
Revision Note	Not applicable.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

US Only: This safety data sheet complies with the requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

Disclaimer

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