



MATERIAL SAFETY DATA SHEET

GEL LP-10

Material Safety Data Sheet 15/10/2013 - version 2

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade name: GEL LP-10
Trade code: F014092
Chemical description: Product based on mixed alkyl phosphate ester.
Company:
GASFRAC Energy Services Inc. - 1900, 801 - 6 Ave. SW. –
Calgary, AB T2P 3W2 – CANADA
Tel: (403) 237-6077 - Fax: (403) 269-3722
Emergency telephone number of the company and/or of an authorised advisory centre:
Phone n. 403-237-6077
The emergency contact should only be used in the event of chemical emergencies involving a spill, leak, fire exposure or accidental involving chemicals.

EMERGENCY OVERVIEW

WARNING:

Causes skin and eye burns.
Combustible liquid and vapour.
Prolonged or excessive inhalation may cause respiratory tract irritation.

Appearance: Liquid, water white.

Odour: Slight.

HMIS INFORMATION

HEALTH 3

FLAMMABILITY 2

REACTIVITY 1

PERSONAL PROT. C

HAZARD INDEX: 4 = SEVERE

3 = SERIOUS

2 = MODERATE

1 = SLIGHT

0 = MINIMAL

C* Safety glasses, gloves, chemical apron.

2. COMPOSITION, INFORMATION ON INGREDIENTS

Ingredients:

n	NAME	CAS	%WEIGHT	OSHA.PEL mg/m3	OSHA.STEAL mg/m3	TLV-STEL mg/m3	NOTE
0	Mixed alkyl phosphate ester	-	70-95%	-	-	-	-
1	Phosphoric acid	7664-38-2	1-5%	-	-	3*	-

*: American Conference of Governmental Industrial Hygienists (ACGIH).

3. HAZARDS IDENTIFICATION

GENERAL PHRASES

WARNING:

Causes skin and eye burns.
Combustible liquid and vapour.
Prolonged or excessive inhalation may cause respiratory tract irritation.

CARCINOGENIC

Not Carcinogenic IARC\NTP\OSHA

4. FIRST AID MEASURES

Contact with skin:

Immediately take off all contaminated clothing.
Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.
OBTAIN IMMEDIATE MEDICAL ATTENTION.

Contact with eyes:



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Wash immediately and thoroughly with running water, keeping eyelids raised, for at least 10 minutes. Following this, protect the eyes with sterile gauze or a clean, dry, handkerchief. GET MEDICAL ATTENTION.

Do not use eyewash or ointment of any kind (before obtaining an examination or advice from an eye specialist).

Swallowing:

Do not under any circumstances induce vomiting. GET MEDICAL ATTENTION IMMEDIATELY.

Inhalation:

Ventilate the premises. The patient is to be removed immediately from the contaminated premises to rest in a well ventilated area. GET MEDICAL ATTENTION.

5. FIRE-FIGHTING MEASURES

Flash Point: 151 °F (66 °C) Method: closed cup

Osha Flammability: Combustible liquid

Lower flammable limit nil %

Upper flammable limit nil %

Autoignition temperature nil F (nil C)

Recommended extinguishers:

Water, CO2, Foam, Chemical powders, according to the materials involved in the fire.

Extinguishers not to be used:

None in particular.

Risks arising from combustion:

Avoid inhaling the fumes.

Protective equipment:

Use protection for the respiratory tract.

Cool the containers exposed to the fire with water.

6. ACCIDENTAL RELEASE MEASURES

Measures for personal safety:

Use a mask, gloves and protective clothing.

Environmental measures:

Limit leakages with earth or sand.

If the product has escaped into a water course, into the drainage system, or has contaminated the ground or vegetation, notify the competent authorities.

Cleaning methods:

Rapidly recover the product. To do so, wear a mask and protective clothing.

If the product is in a liquid form, stop it from entering the drainage system.

Recover the product for re-use if possible, or for elimination. The product might, where appropriate, be absorbed by inert material.

7. HANDLING AND STORAGE

Handling precautions:

Avoid contact and inhalation of the vapours/spray/dusts. See, too, paragraph 8 below.

Do not eat or drink while working.

Do not smoke while working.

Incompatible materials:

Not known.

Storage conditions:

Adequate ventilation in working area.

Always keep the containers tightly closed.

Keep away from heat, sparks, and flame.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Instructions as regards storage premises:

Adequately ventilated premises.

Packaging suggested:



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Plastic totes.
Incompatible materials:
Aluminium and alloys of copper.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Precautionary measures:
Give adequate ventilation to the premises where the product is stored and/or handled.
Respiratory protection:
Use respiratory protection where ventilation is insufficient or exposure is prolonged.
Protection for hands:
Use protective gloves that provides comprehensive protection.
Eye protection:
Use close fitting safety goggles and/or visor conforming.
Protection for skin:
Use clothing that provides comprehensive protection to the skin.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid, water white.
Odour:	Alcohol.
pH:	< 2.5
Solubility in water:	Dispersible
Specific Gravity (water=1):	0.99 at 68 °F/ 20°C.
Boiling Point	Data not available.

10. STABILITY AND REACTIVITY

Conditions to avoid:
Stable under normal conditions.
Substances to avoid:
Strong oxidising agents and alkalis.
Avoid contact with combustible materials. The product could catch fire.
Hazardous decomposition products:
Stable under normal conditions.

11. TOXICOLOGICAL INFORMATION

Skin contact:	Causes skin burns.
Eye contact:	Causes eye burns.
Inhalation:	Prolonged or excessive inhalation may cause respiratory tract irritation.
Acute oral toxicity on rats (LD50):	Data not available.

12. ECOLOGICAL INFORMATION

Adopt good working practices, so that the product is not released into the environment.

13. DISPOSAL CONSIDERATIONS

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force. 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.

14. TRANSPORT INFORMATION

US DOT	UN 3265 Corrosive liquid,acidic, organic n.o.s (Alkyl phosphate ester, Phosphoric acid), 8, PG III
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ADR/RID: UN 3265 Corrosive liquid,acidic, organic n.o.s
(Alkyl phosphate ester, Phosphoric acid), 8, PG III

IMDG CODE: UN 3265 Corrosive liquid,acidic, organic n.o.s
(Alkyl phosphate ester, Phosphoric acid), 8, PG III

IATA/ICAO: UN 3265 Corrosive liquid,acidic, organic n.o.s
(Alkyl phosphate ester, Phosphoric acid), 8, PG III

15. REGULATORY INFORMATION

n	Name	CAS	TSCA	CERCLA	Sara302	Sara313
0	Mixed alkyl phosphate ester.	-	Yes	No	No	No
0	Phosphoric acid	7664-38-2	Yes	5,000	No	No

SARA Title III Section 311/312: Immediate (acute) health effects. - Fire hazard.

State Regulations:

Canadian Regulations: All the ingredients as such or as chemical group are registered in DSL.

Canadian WHMIS Classification: D2B - E: Corrosive liquid - B3 (Combustible Liquid.).

California Proposition 65: Not cited (all components).

16. OTHER INFORMATION

Main bibliographic sources:

ESIS - European chemical Substances Information System - ECB European Chemical Bureau

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eighth Edition - Van Nostrand Reinold

ACGIH - TLVs and BEIs - 2012 edition

The product must be stored, handled and used according to criteria of good industrial practice and to regulations in force. This leaflet is offered for your consideration and guidance only.

This leaflet complements the Technical Data Sheet but does not replace it.

The information herein contained is given to the best of our knowledge at the time of issue.

Due to the several ways in which the product may be used and the possible interaction with variables not depending on or unknown to the supplier, we also cannot accept any liability whatsoever for any loss or damage however arising from the handling and use of our products.