

SAFETY DATA SHEET

**Liquid HE® 150 Polymer XPT**

Version 1.8

Revision Date 2020-02-06

According to Regulation (EC) No. 1907/2006, Regulation (EC) No. 2015/830

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1****Product information**

Product Name : Liquid HE® 150 Polymer XPT

EC-No.Registration number

Chemical name	CAS-No. EC-No. Index No.	Legal Entity Registration number
Acrylamide	79-06-1 201-173-7 616-003-00-0	Chevron Phillips Chemicals International NV 01-2119463260-48-0011
2-Acrylamido-2-Methylpropane Sulfonic Acid, Sodium Salt	5165-97-9 225-948-4	Chevron Phillips Chemicals International NV 01-2119495270-39-0016
Isoprene	78-79-5 201-143-3 601-014-00-5	Chevron Phillips Chemicals International NV 01-2119457891-29-0009
Styrene	100-42-5 202-851-5 601-026-00-0	Chevron Phillips Chemicals International NV 01-2119457861-32-0005
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic, <2% aromatics		Chevron Phillips Chemicals International NV 01-2119456620-43-0010

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

Relevant Identified Uses Supported : Use in Oil and Gas field drilling and production operations - Industrial

1.3**Details of the supplier of the safety data sheet**

Company : Chevron Phillips Chemical Company LP
 Drilling Specialties Company LLC
 10001 Six Pines Drive
 The Woodlands, TX 77380

Local : Chevron Phillips Chemicals International N.V.

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Airport Plaza (Stockholm Building)
Leonardo Da Vincilaan 19
1831 Diegem
Belgium

SDS Requests: (800) 852-5530
Technical Information: (832) 813-4862
Responsible Party: Product Safety Group
Email:sds@cpchem.com

1.4**Emergency telephone:****Health:**

866.442.9628 (North America)

1.832.813.4984 (International)

Transport:

CHEMTREC 800.424.9300 or 703.527.3887(int'l)

Asia: CHEMWATCH (+612 9186 1132) China: 0532 8388 9090

EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Mexico CHEMTREC 01-800-681-9531 (24 hours)

South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600

Argentina: +(54)-1159839431

Responsible Department : Product Safety and Toxicology Group

E-mail address : SDS@CPChem.com

Website : www.CPChem.com

SECTION 2: Hazards identification**2.1****Classification of the substance or mixture****REGULATION (EC) No 1272/2008**

Not a hazardous substance or mixture.

2.2**Labeling (REGULATION (EC) No 1272/2008)**

Not a hazardous substance or mixture.

Additional Labeling:

EUH210 Safety data sheet available on request.

SECTION 3: Composition/information on ingredients**3.1 - 3.2****Substance or Mixture**

Synonyms : HE® 150 Liquid
Liquid Acid Gelling Agent

Molecular formula : Mixture

Hazardous ingredients

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Chemical name	CAS-No. EC-No. Index No.	Classification (REGULATION (EC) No 1272/2008)	Concentration [wt%]
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic, <2% aromatics		Asp. Tox. 1; H304	30 - 60

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures**4.1****Description of first-aid measures**

- General advice : No hazards which require special first aid measures.
- If inhaled : If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.
- In case of skin contact : If on skin, rinse well with water. If on clothes, remove clothes.
- In case of eye contact : Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

SECTION 5: Firefighting measures

- Flash point : >77°C (>171°F)
Method: ASTM D 93

- Autoignition temperature : 225°C (437°F)

5.1**Extinguishing media**

- Suitable extinguishing media : Carbon dioxide (CO₂).
- Unsuitable extinguishing media : High volume water jet.

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

- Specific hazards during fire fighting : Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.3**Advice for firefighters**

- Special protective equipment for fire-fighters : Wear self-contained breathing apparatus for firefighting if necessary.
- Further information : For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool

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fully closed containers.

Fire and explosion protection : Do not spray on an open flame or any other incandescent material. Keep away from open flames, hot surfaces and sources of ignition.

SECTION 6: Accidental release measures**6.1****Personal precautions, protective equipment and emergency procedures**

Personal precautions : Use personal protective equipment. Ensure adequate ventilation.

6.2**Environmental precautions**

Environmental precautions : Prevent further leakage or spillage if safe to do so.

6.3**Methods and materials for containment and cleaning up**

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Keep in suitable, closed containers for disposal.

6.4**Reference to other sections**

Reference to other sections : For personal protection see section 8. For disposal considerations see section 13.

A quantitative risk assessment is not required for the environment.

A quantitative risk assessment is not required for human health.

SECTION 7: Handling and storage**7.1****Precautions for safe handling
Handling**

Advice on safe handling : Avoid formation of aerosol. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Do not spray on an open flame or any other incandescent material. Keep away from open flames, hot surfaces and sources of ignition.

7.2**Conditions for safe storage, including any incompatibilities****Storage**

Requirements for storage areas and containers : No smoking. Keep in a well-ventilated place. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

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SECTION 8: Exposure controls/personal protection**8.2****Exposure controls
Engineering measures**

Adequate ventilation to control airborne concentrations below the exposure guidelines/limits. Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

Personal protective equipment

- Respiratory protection : Wear a supplied-air NIOSH approved respirator unless ventilation or other engineering controls are adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure. Wear a NIOSH approved respirator that provides protection when working with this material if exposure to harmful levels of airborne material may occur, such as: Air-Purifying Respirator for Organic Vapors, Dusts and Mists. Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection. HEPA Filtered Respirators.
- Hand protection : The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
- Eye protection : Eye wash bottle with pure water. Tightly fitting safety goggles.
- Skin and body protection : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Wear as appropriate: Flame retardant protective clothing. Footwear protecting against chemicals.
- Hygiene measures : Wash hands before breaks and at the end of workday.

A quantitative risk assessment is not required for the environment.
A quantitative risk assessment is not required for human health.

SECTION 9: Physical and chemical properties**9.1****Information on basic physical and chemical properties****Appearance**

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Physical state : Liquid
Color : Opaque
Odor : Slight hydrocarbon

Safety data

Flash point : >77°C (>171°F)
Method: ASTM D 93

Lower explosion limit : 0,6 %(V)

Upper explosion limit : 5,1 %(V)

Oxidizing properties : No

Autoignition temperature : 225°C (437°F)

Molecular formula : Mixture

Molecular weight : Not applicable

pH : 7

Boiling point/boiling range : 208°C (406°F)

Vapor pressure : < 1,00 MMHG
at 20°C (68°F)

Relative density : 0,96

Density : 958,6 g/l

Water solubility : dispersible

Partition coefficient: n-
octanol/water : No data available

Viscosity, dynamic : 20.000 cP

Viscosity, kinematic : 71,821 mm²/s
at 40°C (104°F)

Relative vapor density : 6,2
(Air = 1.0)

Evaporation rate : 0,1

SECTION 10: Stability and reactivity**10.1**

Reactivity : Stable at normal ambient temperature and pressure.

10.2

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Chemical stability : This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3**Possibility of hazardous reactions**

Hazardous reactions : Further information: No decomposition if stored and applied as directed.

Hazardous reactions: Vapors may form explosive mixture with air.

10.4

Conditions to avoid : Heat, flames and sparks.

10.5

Materials to avoid : No data available.

10.6

Other data : No decomposition if stored and applied as directed.

SECTION 11: Toxicological information**11.1****Information on toxicological effects****Acute oral toxicity**

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic, <2% aromatics : LD50: > 5.000 mg/kg
Species: Rat

Acute inhalation toxicity

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic, <2% aromatics : LC50: > 5 mg/l
Exposure time: 8 h
Species: Rat
Test atmosphere: vapor
Method: OECD Test Guideline 403

Acute dermal toxicity

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic, <2% aromatics : LD50: > 5.000 mg/kg
Species: Rabbit

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Aspiration toxicity : No aspiration toxicity classification.

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Further information : No data available.

SECTION 12: Ecological information**12.1****Toxicity**

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Toxicity to fish

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic, <2% aromatics : LL0: 1.000 mg/l
Exposure time: 96 h
Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other aquatic invertebrates

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic, <2% aromatics : EL0: 1.000 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)

Toxicity to algae

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic, <2% aromatics : EL50: 1.000 mg/l
Exposure time: 72 h
Species: Pseudokirchneriella subcapitata (green algae)

12.2**Persistence and degradability**

Biodegradability : Taking into consideration the properties of several ingredients, the product is estimated not to be readily biodegradable according to OECD classification.

12.3**Bioaccumulative potential**

Elimination information (persistence and degradability)

Bioaccumulation

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic, <2% aromatics : This material is not expected to bioaccumulate.

12.4**Mobility in soil**

Mobility

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic, <2% aromatics : After release, disperses into the air.

12.5**Results of PBT and vPvB assessment**

Results of PBT assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6**Other adverse effects**

Additional ecological information : This material is not expected to be harmful to aquatic organisms.

Ecotoxicology Assessment

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Short-term (acute) aquatic hazard : This material is not expected to be harmful to aquatic organisms.

Long-term (chronic) aquatic hazard : This material is not expected to be harmful to aquatic organisms.

SECTION 13: Disposal considerations**13.1****Waste treatment methods**

The information in this SDS pertains only to the product as shipped.

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

Product : Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

A quantitative risk assessment is not required for the environment.

A quantitative risk assessment is not required for human health.

SECTION 14: Transport information**14.1 - 14.7****Transport information**

The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the SDS and the bill of lading.

US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

Testing (ASTM D4206) has shown product does not sustain combustion.

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR

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TRANSPORTATION BY THIS AGENCY.

ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE))

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF DANGEROUS GOODS (EUROPE))

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS)

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information**15.1****Safety, health and environmental regulations/legislation specific for the substance or mixture
National legislation**

Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

15.2**Chemical Safety Assessment**

Components : Hydrocarbons,
C11-C14, n-
alkanes,
isoalkanes, cyclic,
<2% aromatics

**Major Accident Hazard
Legislation** : ZEU_SEVES3 Update:
Not applicable

Notification status

Europe REACH : This mixture contains only ingredients which have been registered according to Regulation (EU) No. 1907/2006 (REACH).

Switzerland CH INV : Not in compliance with the inventory

United States of America (USA) : Substance(s) not listed on TSCA inventory
TSCA

Canada DSL : This product contains one or several components that are not on the Canadian DSL nor NDSL.

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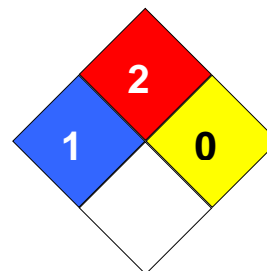
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Australia AICS	:	Not in compliance with the inventory
New Zealand NZIoC	:	Not in compliance with the inventory
Japan ENCS	:	Not in compliance with the inventory
Korea KECI	:	Not in compliance with the inventory
Philippines PICCS	:	Not in compliance with the inventory
China IECSC	:	Not in compliance with the inventory
Taiwan TCSI	:	Not in compliance with the inventory

SECTION 16: Other information

NFPA Classification : Health Hazard: 1
Fire Hazard: 2
Reactivity Hazard: 0

**Further information**

Legacy SDS Number : CPC00467

Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information in this SDS pertains only to the product as shipped.

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 a 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.

Key or legend to abbreviations and acronyms used in the safety data sheet

ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery

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			Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50	Lethal Concentration 50%		

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