SAFETY DATA SHEET

Liquid HE® 150 XPT

Version 1.4

Revision Date 2015-10-06

DRILLING SPECIALTIES COMPANY

A DIVISION OF CHEVRON PHILLIPS CHEMICAL COMPANY LP

Product information	
Product Name Material	: Liquid HE® 150 XPT : 1111304, 1103273, 1099686
Use	: Drilling Fluid Additive
Company	 Chevron Phillips Chemical Company LP Drilling Specialties Company LLC 10001 Six Pines Drive The Woodlands, TX 77380
Emergency telephone:	
Asia: +800 CHEMCALL EUROPE: BIG +32.14.5	
Responsible Department E-mail address	: Product Safety and Toxicology Group : SDS@CPChem.com
Website	: SDS@CPChem.com : www.CPChem.com
Website	: www.CPChem.com
Website CTION 2: Hazards identifica assification of the substanc bbally Harmonized System Emergency Overview	: www.CPChem.com ation e or mixture of Classification and Labeling of Chemicals (GHS)
Website CTION 2: Hazards identifica assification of the substance bally Harmonized System of Emergency Overview Physical state: Liquid	: www.CPChem.com ation e or mixture of Classification and Labeling of Chemicals (GHS) Color: Opaque Odor: Slight hydrocarbon
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Labeling	
Signal Word	: Warning
Hazard Statements	: H227: Combustible liquid.
Precautionary Statements	 Prevention: P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking. P264 Wash skin thoroughly after handling. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. Response: P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction. Storage: P403 + P235 Store in a well-ventilated place. Keep cool. P405 Store locked up.
Carcinogenicity:	
IARC	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
NTP	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
ACGIH	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
SECTION 3: Composition/infor	mation on ingredients
Synonyms	: HE® 150 Liquid Liquid Acid Gelling Agent
Molecular formula	: Mixture
Component	CAS-No. Weight %
Hydrocarbons, C11-C14, n-a	alkanes, 30 - 60
isoalkanes, cyclic, <2% aror	natics
SECTION 4: First aid measures	
General advice	: Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Do not leave the victim
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		unattended.
If inhaled	:	If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact	:	If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.
In case of eye contact	:	Immediately flush eye(s) with plenty of water. 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. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
CTION 5: Firefighting measu	ires	
Flash point	:	> 77 °C (> 171 °F) Method: ASTM D 93
Autoignition temperature	:	225 °C (437 °F)
Suitable extinguishing media	:	Carbon dioxide (CO2).
Unsuitable extinguishing media	:	High volume water jet.
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 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.
Hazardous decomposition products	:	No data available.
TION 6: Accidental release	me	asures
Demonal propertients		Lice personal protective equipment
Personal precautions	•	Use personal protective equipment.
Environmental precautions	:	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
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.
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Handling

Advice on safe handling	:	Avoid formation of aerosol. Do not breathe vapors/dust. Avoid contact with skin and eyes. 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.
Storage		
Requirements for storage areas and containers	:	No smoking. Keep container tightly closed in a dry and well- ventilated place. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

SECTION 8: Exposure controls/personal protection

Engineering measures

Adequate ventilation to control airborned 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 Dusts and Mists / P100. 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.
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.
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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:. Protective suit. Safety shoes.
Hygiene measures	: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.
TION 9: Physical and chem	ical properties
Information on basic phys	ical and chemical properties
Appearance	
Physical state	: Liquid
Color Odor	: Opaque : 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)
Thermal decomposition	: No data available
Molecular formula	: Mixture
Molecular weight	: Not applicable
рН	: 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-	: No data available
octanol/water Viscosity, dynamic	: 20,000 cP
Viscosity, kinematic	: 71.821 mm2/s

Liquid UE® 150 VDT	SAFETY DATA SHEET
Liquid HE® 150 XPT	Devision Date 2015 10.00
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Relative vapor density	: 6.2 (Air = 1.0)
Evaporation rate	: 0.1
SECTION 10: Stability and react	vity
Chemical stability	: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Possibility of hazardous rea	ctions
Conditions to avoid	: Heat, flames and sparks.
Thermal decomposition	: No data available
Hazardous decomposition products	: No data available
Other data	: No decomposition if stored and applied as directed.
SECTION 11: Toxicological info	mation
Liquid HE® 150 XPT Skin irritation	: May cause skin irritation.
Liquid HE® 150 XPT Eye irritation	: May cause eye irritation.
	Vapors may cause irritation to the eyes, respiratory system and the skin.
Liquid HE® 150 XPT Aspiration toxicity	: May be fatal if swallowed and enters airways.
Liquid HE® 150 XPT Further information	: Solvents may degrease the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Concentrations substantially above the TLV value may cause narcotic effects. Solvents may degrease the skin.
SECTION 12: Ecological information	tion
Toxicity to fish	
Hydrocarbons, C11-C14, n- alkanes, isoalkanes, cyclic,	: LL0: 1,000 mg/l Exposure time: 96 h
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<2% aromatics	Species: Oncorhynchus mykiss (rainbow trout)
Toxicity to daphnia and oth	ner 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)
Elimination information (persi	istence and degradability)
Biodegradability	: No data available
Ecotoxicology Assessment	t
Additional ecological information	: No data available
TION 13: Disposal consider	ations
The information in this SDS r	
	pertains only to the product as shipped.
Use material for its intended may meet the criteria of a haz other State and local regulated regulated components may b	pertains only to the product as shipped. purpose or recycle if possible. This material, if it must be discarded, zardous waste as defined by US EPA under RCRA (40 CFR 261) or ons. Measurement of certain physical properties and analysis for be necessary to make a correct determination. If this material is ste, federal law requires disposal at a licensed hazardous waste
Use material for its intended may meet the criteria of a haz other State and local regulation regulated components may b classified as a hazardous wa	purpose or recycle if possible. This material, if it must be discarded, zardous waste as defined by US EPA under RCRA (40 CFR 261) or ons. Measurement of certain physical properties and analysis for be necessary to make a correct determination. If this material is
Use material for its intended may meet the criteria of a haz other State and local regulated regulated components may b classified as a hazardous was disposal facility.	 purpose or recycle if possible. This material, if it must be discarded, zardous waste as defined by US EPA under RCRA (40 CFR 261) or ons. Measurement of certain physical properties and analysis for be necessary to make a correct determination. If this material is ste, federal law requires disposal at a licensed hazardous waste Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container.
Use material for its intended may meet the criteria of a haz other State and local regulated regulated components may b classified as a hazardous was disposal facility. Product	 purpose or recycle if possible. This material, if it must be discarded, zardous waste as defined by US EPA under RCRA (40 CFR 261) or ons. Measurement of certain physical properties and analysis for be necessary to make a correct determination. If this material is ste, federal law requires disposal at a licensed hazardous waste 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. 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.
Use material for its intended may meet the criteria of a haz other State and local regulation regulated components may be classified as a hazardous was disposal facility. Product Contaminated packaging	 purpose or recycle if possible. This material, if it must be discarded, zardous waste as defined by US EPA under RCRA (40 CFR 261) or ons. Measurement of certain physical properties and analysis for be necessary to make a correct determination. If this material is ste, federal law requires disposal at a licensed hazardous waste 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. 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.
Use material for its intended may meet the criteria of a haz other State and local regulation regulated components may be classified as a hazardous way disposal facility. Product Contaminated packaging TION 14: Transport information shipments in non-bulk pack Consult the appropriate dome Goods Regulations for addition etc.) Therefore, the information	 purpose or recycle if possible. This material, if it must be discarded, zardous waste as defined by US EPA under RCRA (40 CFR 261) or ons. Measurement of certain physical properties and analysis for be necessary to make a correct determination. If this material is ste, federal law requires disposal at a licensed hazardous waste 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. 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.
Use material for its intended may meet the criteria of a haz other State and local regulation regulated components may be classified as a hazardous wat disposal facility. Product Contaminated packaging CION 14: Transport informat The shipping descriptions estimates Shipments in non-bulk pace Consult the appropriate dome Goods Regulations for addition etc.) Therefore, the information description for the material. If bill of lading.	 purpose or recycle if possible. This material, if it must be discarded, zardous waste as defined by US EPA under RCRA (40 CFR 261) or ons. Measurement of certain physical properties and analysis for be necessary to make a correct determination. If this material is ste, federal law requires disposal at a licensed hazardous waste 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. 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. ttion shown here are for bulk shipments only, and may not apply to kages (see regulatory definition).

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TRANSPORTATION BY THIS AGENCY.

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

TRANSPORTATION BY	NAL MARITIME DANGEROUS GOODS) A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR THIS AGENCY.
	IR TRANSPORT ASSOCIATION) A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR THIS AGENCY.
	ANGEROUS GOODS BY ROAD (EUROPE)) A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR THIS AGENCY.
DANGEROUS GOODS (EL	A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR
OF DANGEROUS GOODS	MENT CONCERNING THE INTERNATIONAL CARRIAGE BY INLAND WATERWAYS) A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR THIS AGENCY.
	Annex II of MARPOL 73/78 and the IBC Code
Transport in bulk according to SECTION 15: Regulatory inform	
SECTION 15: Regulatory inform	
SECTION 15: Regulatory inform	mation
SECTION 15: Regulatory inform National legislation SARA 311/312 Hazards CERCLA Reportable	 mation : Fire Hazard : This material does not contain any components with a CERCLA
SECTION 15: Regulatory inform National legislation SARA 311/312 Hazards CERCLA Reportable Quantity SARA 302 Reportable	 mation Fire Hazard This material does not contain any components with a CERCLA RQ. This material does not contain any components with a SARA
SECTION 15: Regulatory inform National legislation SARA 311/312 Hazards CERCLA Reportable Quantity SARA 302 Reportable Quantity SARA 302 Threshold	 mation Fire Hazard This material does not contain any components with a CERCLA RQ. This material does not contain any components with a SARA 302 RQ. No chemicals in this material are subject to the reporting

quid HE® 150 XPT	SAFETY DATA SHE
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Quantity	304 EHS RQ.
SARA 313 Ingredients	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
Clean Air Act	
Potential Class II	duct neither contains, nor was manufactured with a Class I or ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR ot. A, App.A + B).
This product does not contain a Act Section 12 (40 CFR 61).	any hazardous air pollutants (HAP), as defined by the U.S. Clean Ai
This product does not contain a Accidental Release Prevention	any chemicals listed under the U.S. Clean Air Act Section 112(r) for (40 CFR 68.130, Subpart F).
This product does not contain a Intermediate or Final VOC's (40	any chemicals listed under the U.S. Clean Air Act Section 111 SOC
US State Regulations	
Pennsylvania Right To Know :	No components are subject to the Pennsylvania Right to Know Act.
New Jersey Right To Know	No components are subject to the New Jersey Right to Know Act.
California Prop. 65 : Ingredients	This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.
Notification status Europe REACH United States of America TSC Canada DSL	 On the inventory, or in compliance with the inventory A : Not On TSCA Inventory : This product contains one or several components that are not on the Canadian DSL nor NDSL. : Not in compliance with the inventory
Australia AICS New Zealand NZIoC	: Not in compliance with the inventory

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 Not in compliance with the inventory
n
ly : Health Hazard: 1 Fire Hazard: 1 Reactivity Hazard: 0
: CPC00467
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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.

ACGIH	American Conference of	LD50	Lethal Dose 50%
	Government Industrial Hygienists		
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effe
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agenc
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupation 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 Concentra
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 Substan
MAK	Germany Maximum Concentration	PRNT	Presumed Not Toxic

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	Values		
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery 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%		

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