

Version 1.0 Revision Date 2023-08-09

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

**Product information** 

Product Name : HEC 10 Liquid Polymer XPT

Material : 1129519

Use : Drilling Fluid Additive

Company : Chevron Phillips Chemical Company LP

**Drilling Specialties Company LLC** 

10001 Six Pines Drive The Woodlands, TX 77380

#### **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

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

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

Austria: VIZ +43 1 406 43 43 (24 hours/day, 7 days/week)

Belgium: 070 245 245 (24 hours/day, 7 days/week)

Bulgaria: +359 2 9154 233

Croatia: +3851 2348 342 (24 hours/day, 7 days/week)

Cyprus: 1401

Czech Republic: Toxicological Information Center +420 224 919 293, +420 224 915 402

Denmark: Danish Poison Center (Giftlinjen): +45 8212 1212 Estonia: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Finland: 0800 147 111 09 471 977 (24 hours/day)

France: ORFILA number (INRS): + 33 (0) 1 45 42 59 59 (24 hours/day, 7 days/week)

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

Greece: (0030) 2107793777 (24 hours/day, 7 days/week) Hungary: +36-80-201-199 (24 hours/day, 7 days/week)

Iceland: 543 2222 (24 hours/day, 7 days/week)

Ireland: BIG +32.14.584545 (phone) or +32.14583516 (telefax) Italy: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Latvia: State Fire and Rescue Service, phone number: 112; Toxicology and Sepsis Clinic Poisoning and Drug Information Center, Hipokrāta 2, Riga, Latvia, LV-1038, phone number +371

67042473. (24 hours.)

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

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Lithuania: +370 (85) 2362052

Luxembourg: (+352) 8002 5500 (24 hours/day, 7 days/week)

Malta: +356 2395 2000

The Netherlands: NVIC: +31 (0)88 755 8000 Norway: 22 59 13 00 (24 hours/day, 7 days/week)

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

Portugal: CIAV phone number: +351 800 250 250

Romania: +40213183606 Slovakia: +421 2 5477 4166 Slovenia: Phone number: 112

Spain: National Emergency Telephone Number of Spanish Poison Centre: +34 91 562 04 20 (24

hours/day, 7 days/week)

Sweden: 112 – ask for Poisons Information

Responsible Department : Product Safety and Toxicology Group

E-mail address : SDS@CPChem.com Website : www.CPChem.com

## **SECTION 2: Hazards identification**

#### Classification of the substance or mixture

This product has been classified in accordance with the hazard communication standard 29 CFR 1910.1200; the SDS and labels contain all the information as required by the standard.

Classification

: Flammable liquids, Category 4

Labeling

Signal Word : Warning

Hazard Statements : H227: Combustible liquid.

Precautionary Statements : Prevention:

P210 Keep away from heat/ sparks/ open flames/ hot

surfaces. No smoking.

P280 Wear protective gloves/ eye protection/ face protection.

Response:

P370 + P378 In case of fire: Use dry sand, dry chemical or

alcohol-resistant foam to extinguish.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

Disposal:

P501 Dispose of contents/ container to an approved waste

disposal plant.

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.

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# **SECTION 3: Composition/information on ingredients**

Synonyms **Drilling Mud Additive** 

> HEC HEC 10

HEC 10 Liquid polymer

Molecular formula Mixture

Component	CAS-No.	Weight %
Hydrocarbons, C11-C14, n-alkanes,		30 - 60
isoalkanes, cyclic, <2% aromatics		

#### **SECTION 4: 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.

: Flush eyes with water as a precaution. Remove contact In case of eye 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.

## **SECTION 5: Firefighting measures**

Flash point >83°C (>181°F)

Method: ASTM D 93

Autoignition temperature 225°C (437°F)

Suitable extinguishing

media

: Carbon dioxide (CO2).

Unsuitable extinguishing

media

: High volume water jet.

Specific hazards during fire

fighting

: Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

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.

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Fire and explosion

protection

Do not spray on a naked flame or any incandescent material. Keep away from open flames, hot surfaces and sources of

ignition.

Hazardous decomposition

products

: Carbon oxides.

#### **SECTION 6: Accidental release measures**

Personal precautions : Use personal protective equipment. Ensure adequate

ventilation.

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

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.

## **SECTION 7: Handling and storage**

#### 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 a naked flame or any incandescent material. Keep away from open flames, hot surfaces and sources of

ignition.

#### **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.

Use : Drilling Fluid Additive

## 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.

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Respiratory protection : If ventilation or other engineering controls are not adequate to

maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure, a supplied-air NIOSH approved respirator may be appropriate. If exposure to harmful levels of airborne material may occur, a NIOSH approved respirator that provides protection may be appropriate, such as:. Air-Purifying Respirator for Organic Vapors. A positive pressure, air-supplying respirator may be appropriate if there is potential for uncontrolled release, aerosolization, 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.

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.

## **SECTION 9: Physical and chemical properties**

# Information on basic physical and chemical properties

#### **Appearance**

Form : liquid
Physical state : liquid
Color : Opaque
Odor : Hydrocarbon
Odor Threshold : No data available

Safety data

Flash point : >83°C (>181°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

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Molecular weight : 172 g/mol

: Not applicable рΗ

: <-39°C (<-38°F) Pour point

Method: ASTM D-97/5950/6892/7346

Initial boiling point and boiling : 207°C (405°F)

range

Method: ASTM D 86

: No data available Vapor pressure

Relative density : 0.97

at 15.6 °C (60.1 °F)

: 0.8 g/cm3 Density

at 15°C (59°F)

Method: ASTM D4052

Water solubility : partly soluble

Partition coefficient: n-

octanol/water

: No data available

Viscosity, kinematic : 42938 mm2/s

> at 40°C (104°F) Method: ASTM D 445

Relative vapor density

(Air = 1.0)

: 5.9 Evaporation rate

# **SECTION 10: Stability and reactivity**

Reactivity : Stable at normal ambient temperature and pressure.

**Chemical stability** : This material is considered stable under normal ambient and

anticipated storage and handling conditions of temperature

and pressure.

Possibility of hazardous reactions

Hazardous reactions : Hazardous reactions: Hazardous polymerization does not

occur.

Further information: No decomposition if stored and applied as

directed.

Hazardous reactions: Vapors may form explosive mixture with

Conditions to avoid : Heat, flames and sparks.

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Materials to avoid : May react with oxygen and strong oxidizing agents, such as

chlorates, nitrates, peroxides, etc.

**Hazardous decomposition** 

products

: Carbon oxides

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

#### **SECTION 11: Toxicological information**

Acute oral toxicity

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic,

<2% aromatics

: LD50: > 5,000 mg/kg Species: Rat

Sex: male and female

Information given is based on data obtained from similar

substances.

Acute inhalation toxicity

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic,

<2% aromatics

: LC50: > 5 mg/l Exposure time: 8 h

Species: Rat Sex: male

Test atmosphere: vapor

Method: OECD Test Guideline 403

Information given is based on data obtained from similar

substances.

Acute dermal toxicity

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic,

<2% aromatics

: LD50: > 5,000 mg/kg Species: Rabbit

Sex: male and female

Information given is based on data obtained from similar

substances.

Skin irritation

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic,

<2% aromatics

: No skin irritation

Information given is based on data obtained from similar

substances.

Eye irritation

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic,

<2% aromatics

: No eye irritation

Information given is based on data obtained from similar

substances.

Sensitization

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic,

<2% aromatics

: Did not cause sensitization on laboratory animals. Information given is based on data obtained from similar

substances.

Repeated dose toxicity

Hydrocarbons, C11-C14, n- : Species: Rat, male and female

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alkanes, isoalkanes, cyclic, <2% aromatics

Sex: male and female Application Route: Inhalation Dose: 0, 2600, 5200, 10400 mg/m3

Exposure time: 90 d

Number of exposures: 6h/d; 5d/wk

NOEL: 10400 mg/m3

Method: OECD Test Guideline 413 No adverse effects expected

Information given is based on data obtained from similar

substances.

## Genotoxicity in vitro

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

Test Type: Reverse mutation assay Test system: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Remarks: Information given is based on data obtained from

similar substances.

Test Type: Chromosome aberration test in vitro Test system: Chinese hamster ovary cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 479

Result: negative

Remarks: Information given is based on data obtained from

similar substances.

Test Type: Mouse lymphoma assay Test system: mouse lymphoma cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: negative

Remarks: Information given is based on data obtained from

similar substances.

#### Genotoxicity in vivo

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

Test Type: Dominant lethal assay

Species: Rat

Route of Application: Inhalation Method: OECD Test Guideline 478

Result: negative

Remarks: Information given is based on data obtained from

similar substances.

Test Type: Micronucleus test

Species: Mouse

Route of Application: Oral

Method: OECD Test Guideline 474

Result: negative

Remarks: Information given is based on data obtained from

similar substances.

## Reproductive toxicity

Hydrocarbons, C11-C14, n- : Species: Rat

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alkanes, isoalkanes, cyclic,

<2% aromatics

Sex: male and female Application Route: Inhalation

Exposure time: 8 wk

Number of exposures: 6h/d;5d/wk Method: OECD Guideline 421 NOAEL Parent: 1720 mg/m3 NOAEL F1: 1720 mg/m3

Fertility and developmental toxicity tests did not reveal any

effect on reproduction.

Information given is based on data obtained from similar

substances.

## **Developmental Toxicity**

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic,

<2% aromatics

: Species: Rat

Application Route: Inhalation Exposure time: 6h/d;5d/wk Number of exposures: daily Test period: GD 6-15 Method: OECD Guideline 414

NOAEL Teratogenicity: 5220 mg/m3 NOAEL Maternal: 5220 mg/m3

Animal testing did not show any effects on fetal development. Information given is based on data obtained from similar

substances.

## **Aspiration toxicity**

Hydrocarbons, C11-C14, nalkanes, isoalkanes, cyclic,

<2% aromatics

: May be fatal if swallowed and enters airways.

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**Further information** : No data available.

## **SECTION 12: Ecological information**

# 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) semi-static test Method: OECD Test Guideline 203

## 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) Method: OECD Test Guideline 202

Toxicity to algae

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic,

: EL50: > 1,000 mg/l Exposure time: 72 h

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<2% aromatics</p>
Species: Pseudokirchneriella subcapitata (green algae)

static test Method: OECD Test Guideline 201

Biodegradability: Taking into consideration the properties of several ingredients,

the product is estimated not to be readily biodegradable

according to OECD classification.

Elimination information (persistence and degradability)

Bioaccumulation

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic,

<2% aromatics

: The product may be accumulated in organisms.

Mobility

Hydrocarbons, C11-C14, n-

alkanes, isoalkanes, cyclic,

<2% aromatics

Additional ecological

information

: After release, disperses into the air.

: This material is not expected to be harmful to aquatic

organisms.

No data available

**Ecotoxicology Assessment** 

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**

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.

## **SECTION 14: 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).

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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 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.

Maritime transport in bulk according to IMO instruments

## **SECTION 15: Regulatory information**

# **National legislation**

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)

CERCLA Reportable

Quantity

: This material does not contain any components with a CERCLA

RQ.

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SARA 302 Reportable

Quantity

: This material does not contain any components with a SARA

302 RQ.

SARA 302 Threshold Planning Quantity

: This material does not contain any components with a section

302 EHS TPQ.

SARA 304 Reportable

Quantity

: This material does not contain any components with a section

304 EHS RQ.

SARA 313 Components : 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

Ozone-Depletion

Potential

: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR

82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

## **US State Regulations**

Pennsylvania Right To Know

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

aromatics -

Cellulose, 2-Hydroxyethyl Ether - 9004-62-0

California Prop. 65 Components : This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive

defects.

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**Notification status** 

Europe REACH : This product is in full compliance according to REACH

regulation 1907/2006/EC.

Switzerland CH INV : Not in compliance with the inventory

United States of America (USA) : Not On TSCA Inventory

**TSCA** 

Canada DSL : This product contains one or several components that

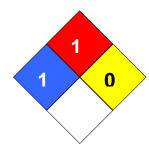
are not on the Canadian DSL nor NDSL.

Australia AIIC : 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 Taiwan TCSI : Not in compliance with the inventory China IECSC : Not in compliance with the inventory

## **SECTION 16: Other information**

NFPA Classification : Health Hazard: 1

Fire Hazard: 1 Reactivity Hazard: 0



#### **Further information**

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	LD50	Lethal Dose 50%	
	Government Industrial Hygienists			
AIIC	Australian Inventory of Industrial	LOAEL	Lowest Observed Adverse Effect	
	Chemicals		Level	
DSL	Canada, Domestic Substances	NFPA	National Fire Protection Agency	
	List			
NDSL	Canada, Non-Domestic	NIOSH	National Institute for Occupational	
	Substances List		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	

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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 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%	ATE	Acute toxicity estimate

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