

**Diesel Reference Fuel T-30**

Version 1.7

Revision Date 2017-05-16

according to GB/T 16483 and GB/T 17519

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

Product Name : Diesel Reference Fuel T-30
Material : 1024272, 1108916, 1024276, 1024273, 1024274, 1024275,
1032194

Company : Chevron Phillips Chemical Company LP
Specialty Chemicals
10001 Six Pines Drive
The Woodlands, TX 77380

Local : Chevron Phillips Chemicals (Shanghai) Corporation
Room 1810-1812, Shanghai Mart,
2299 Yan An Road (W),
Shanghai, PRC 200336

local emergency contact number : 0532-83889090

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)

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

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****GHS Classification and Labeling: Follow GB 13690, GB 15258 and GB 30000.2 to GB 30000.29 (GHS 2011)****Emergency Overview**

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Danger

Form: Liquid **Physical state:** Liquid **Color:** Pale yellow to brown (if undyed), red to purple (dyed) **Odor:** Mild

Hazards : Flammable liquid and vapor. Harmful if inhaled. Causes skin irritation. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure. May be fatal if swallowed and enters airways. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Classification

: Flammable liquids, Category 3
 Acute toxicity, Category 4, Inhalation
 Skin corrosion/irritation, Category 2
 Carcinogenicity, Category 2
 Specific target organ systemic toxicity - repeated exposure, Category 2, Liver, Bone, thymus
 Aspiration hazard, Category 1
 Acute aquatic toxicity, Category 2
 Chronic aquatic toxicity, Category 2

Labeling

Symbol(s)



Signal Word

: Danger

Hazard Statements

: H226: Flammable liquid and vapor.
 H304: May be fatal if swallowed and enters airways.
 H315: Causes skin irritation.
 H332: Harmful if inhaled.
 H351: Suspected of causing cancer.
 H373: May cause damage to organs (Liver, Blood) through prolonged or repeated exposure.
 H411: Toxic to aquatic life with long lasting effects.

Precautionary Statements

: **Prevention:**
 P201: Obtain special instructions before use.
 P202: Do not handle until all safety precautions have been read and understood.
 P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.
 P233: Keep container tightly closed.
 P240: Ground/bond container and receiving equipment.
 P241: Use explosion-proof electrical/ ventilating/ lighting/ equipment.
 P242: Use only non-sparking tools.
 P243: Take precautionary measures against static discharge.
 P260: Do not breathe dust/fume/gas/mist/vapor/spray.
 P264: Wash skin thoroughly after handling.
 P271: Use only outdoors or in a well-ventilated area.
 P273: Avoid release to the environment.
 P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:

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P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor.
 P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P304 + P340 + P312: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
 P308 + P313: IF exposed or concerned: Get medical advice/attention.
 P331: Do NOT induce vomiting.
 P332 + P313: If skin irritation occurs: Get medical advice/attention.
 P362 + P364: Take off contaminated clothing and wash it before reuse.
 P370 + P378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
 P391: Collect spillage.
Storage:
 P403 + P235: Store in a well-ventilated place. Keep cool.
 P405: Store locked up.
Disposal:
 P501: Dispose of contents/ container to an approved waste disposal plant.

SECTION 3: Composition/information on ingredients

Synonyms : Diesel Reference Fuel T

Molecular formula : Mixture

Chemical name	CAS-No. / EINECS-No.	Concentration [wt%]
Diesel fuel	68476-34-6	100

SECTION 4: First aid measures

General advice : Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Material may produce a serious, potentially fatal pneumonia if swallowed or vomited.

If inhaled : Consult a physician after significant exposure. If unconscious, place in recovery position and seek medical advice.

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 : 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 induce vomiting. Do not give milk or alcoholic beverages. Never give anything by

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mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

SECTION 5: Firefighting measures

Flash point	: 86.6 °C (187.9 °F)
Autoignition temperature	: No data available
Suitable extinguishing media	: Alcohol-resistant foam. Carbon dioxide (CO ₂). Dry chemical.
Unsuitable extinguishing media	: High volume water jet.
Specific hazards during fire fighting	: Do not allow run-off from fire fighting to enter drains or water courses.
Special protective equipment for fire-fighters	: Wear self-contained breathing apparatus for firefighting if necessary.
Further information	: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. 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. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Keep away from open flames, hot surfaces and sources of ignition.
Hazardous decomposition products	: Hydrocarbons. Carbon oxides.

SECTION 6: Accidental release measures

Personal precautions	: Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.
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).

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SECTION 7: Handling and storage**Handling**

Advice on safe handling : Avoid formation of aerosol. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. 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. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). 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. Containers which are opened must be carefully resealed and kept upright to prevent leakage. 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 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. 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

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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 according to the amount and concentration of the dangerous substance at the work place. Wear as appropriate:. Flame retardant protective clothing. Footwear protecting against chemicals.
- Hygiene measures : When using do not eat or drink. When using do not smoke. 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 at 20 °C (68 °F)
(101.30 kPa)
- Color : Pale yellow to brown (if undyed), red to purple (dyed)
- Odor : Mild

Safety data

- Flash point : 86.6 °C (187.9 °F)
- Lower explosion limit : No data available
- Upper explosion limit : No data available
- Oxidizing properties : No
- Autoignition temperature : No data available
- Thermal decomposition : No data available
- Molecular formula : Mixture
- Molecular weight : Not applicable
- pH : Not applicable
- Pour point : -6 °C (21 °F)
Method: ASTM D97
- Boiling point/boiling range : 208 - 347 °C (406 - 657 °F)
Method: ASTM D 86
- Vapor pressure : 0.10 kPa
at 40 °C (104 °F)

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Relative density	: 0.786 at 21 °C (70 °F), ASTM D 1298
Density	: 0.7864 g/cm ³
Bulk density	: 6.56 L/G
Water solubility	: Negligible
Partition coefficient: n-octanol/water	: No data available
Viscosity, kinematic	: 2.4 cSt at 40 °C (104 °F)
Relative vapor density	: No data available
Evaporation rate	: No data available
Percent volatile	: > 99 %

SECTION 10: Stability and reactivity

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

Conditions to avoid	: Heat, flames and sparks.
Materials to avoid	: May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.
Thermal decomposition	: No data available
Hazardous decomposition products	: Hydrocarbons Carbon oxides
Other data	: No decomposition if stored and applied as directed.

SECTION 11: Toxicological information**Acute oral toxicity**

Diesel fuel	: LD50: > 5,000 mg/kg Species: Rat Sex: male and female Method: OECD Test Guideline 401
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Acute inhalation toxicity

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Diesel fuel : LC50: 4.1 mg/l
Exposure time: 4 h
Species: Rat
Sex: male and female
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Test substance: yes

Acute dermal toxicity

Diesel fuel : LD50 Dermal: > 4,300 mg/kg
Species: Rabbit
Sex: male and female
Test substance: yes

Skin irritation

Diesel fuel : Irritating to skin.

Eye irritation

Diesel fuel : No eye irritation

Sensitization

Diesel fuel : Did not cause sensitization on laboratory animals.

Repeated dose toxicity

Diesel fuel : Species: Rat, Male and female
Sex: Male and female
Application Route: Dermal
Dose: 0, 30, 125, 500 mg/kg
Exposure time: 13 wks
Number of exposures: daily, 5 days/week
NOEL: 30 mg/kg
Method: OECD Guideline 411
Target Organs: Thymus, Liver, Bone marrow
Information given is based on data obtained from similar substances.

Species: Rat, Male and female
Sex: Male and female
Application Route: inhalation (dust/mist/fume)
Dose: 0, 0.35, 0.88, 1.71 mg/l
Exposure time: 13 wks
Number of exposures: Twice/wk
NOEL: > 1.71 mg/l
Method: OECD Guideline 413

Carcinogenicity

Diesel fuel : Species: Mouse
Sex: male
Dose: 0, 25 ul
Exposure time: lifetime
Number of exposures: 3 times/wk

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Remarks: Moderate dermal carcinogen

Developmental Toxicity

Diesel fuel : Species: Rat
 Application Route: Inhalation
 Dose: 0, 86.9, 408.8 ppm
 Number of exposures: 6 h/d
 Test period: GD 6-15
 Method: OECD Guideline 414
 NOAEL Teratogenicity: 408.8 ppm
 NOAEL Maternal: 408.8 ppm
 Information given is based on data obtained from similar substances.

Species: Rat
 Application Route: Dermal
 Dose: 30, 125, 500, 1000 mg/kg
 Exposure time: daily
 Test period: GD 0-20
 Method: OECD Guideline 414
 NOAEL Teratogenicity: 125 mg/kg
 Information given is based on data obtained from similar substances.

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Aspiration toxicity : May be fatal if swallowed and enters airways.

CMR effects

Diesel fuel : Carcinogenicity: Limited evidence of carcinogenicity in animal studies
 Teratogenicity: Animal testing did not show any effects on fetal development.

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Further information : Solvents may degrease the skin.

SECTION 12: Ecological information**Toxicity to fish**

Diesel fuel : LL50: 3.2 mg/l
 Exposure time: 96 h
 Species: Menidia beryllina (Silverside)
 semi-static test Method: EPA/600/4-90/027

Toxicity to daphnia and other aquatic invertebrates

Diesel fuel : EC50: 68 mg/l
 Exposure time: 48 h
 Species: Daphnia magna (Water flea)
 Method: OECD Test Guideline 202

Toxicity to algae

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Diesel fuel : EbC50: 10 mg/l
 Exposure time: 72 h
 Species: Raphidocellus subcapitata (algae)
 static test Analytical monitoring: no
 Method: OECD Test Guideline 201

Biodegradability

Diesel fuel : aerobic
 Result: Not readily biodegradable.
 57.5 %
 Testing period: 28 d
 Method: OECD Test Guideline 301F

Ecotoxicology Assessment

Acute aquatic toxicity
 Diesel fuel : Toxic to aquatic life.

Chronic aquatic toxicity
 Diesel fuel : Toxic to aquatic life with long lasting effects.

Results of PBT assessment
 Diesel fuel : Non-classified PBT substance, Non-classified vPvB substance

Additional ecological information : Toxic to aquatic life with long lasting effects.

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 : The product should not be allowed to enter drains, water courses or the soil. 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).

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous

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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)

UN1202, DIESEL FUEL, COMBUSTIBLE LIQUID, III

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (DIESEL FUEL), 9, III, (86.6 °C), MARINE POLLUTANT, (DIESEL FUEL)

IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (DIESEL FUEL), 9, III

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

UN1202, DIESEL FUEL, 3, III, (D/E), ENVIRONMENTALLY HAZARDOUS, (DIESEL FUEL)

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

UN1202, DIESEL FUEL, 3, III, ENVIRONMENTALLY HAZARDOUS, (DIESEL FUEL)

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

UN1202, DIESEL FUEL, 3, III, ENVIRONMENTALLY HAZARDOUS, (DIESEL FUEL)

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

SECTION 15: Regulatory information

Classification and Labeling of Commonly Used Dangerous Chemical Substances : Primary label: Combustible Liquid.

Notification status

Europe REACH	:	This mixture contains only ingredients which have been registered according to Regulation (EU) No. 1907/2006 (REACH).
United States of America (USA) TSCA	:	On TSCA Inventory
Canada DSL	:	All components of this product are on the Canadian DSL
Australia AICS	:	On the inventory, or in compliance with the inventory
New Zealand NZIoC	:	On the inventory, or in compliance with the inventory
Japan ENCS	:	On the inventory, or in compliance with the inventory

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Korea KECI : On the inventory, or in compliance with the inventory
 Philippines PICCS : On the inventory, or in compliance with the inventory
 China IECSC : On the inventory, or in compliance with the inventory

Other regulations : Law on Prevention and Control of Environment
 Pollution by Solid Waste, Regulation on the Safety
 Management of Hazardous Chemicals, Provisions on
 the Safe Use of Chemicals at Workplace, GB13690:
 General rule for classification and hazard
 communication of chemicals, Law on the Prevention
 and Control of Occupational Diseases, Fire Protection
 Law

SECTION 16: Other information**Further information**

Legacy SDS Number : CPC00523

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 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

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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%		