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

Product information
Product Name: Diesel PC-9-HS Test Fuel
Material: 1109136, 1109135, 1109134, 1109133, 1109132

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

Emergency telephone:
Health:
866.442.9628 (North America)
1.832.813.4984 (International)

Transport:
North America: CHEMTREC 800.424.9300 or 703.527.3887
Asia: +800 CHEMCALL (+800 2436 2255) China:+86-21-22157316
EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
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
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.

Emergency Overview

Danger
Form: Liquid
Physical state: Liquid
Color: Pale yellow to brown (if undyed), red to purple (dyed)
Odor: Mild
OSHA Hazards: Flammable Liquid, Harmful by inhalation., Moderate skin irritant, Aspiration hazard, Carcinogen, Target Organ Effects

Classification
: Flammable liquids , Category 3
Acute toxicity , Category 4 , Inhalation
Skin irritation , Category 2
Carcinogenicity , Category 2

MSDS Number: 100000001030
Diesel PC-9-HS Test Fuel

Version 3.3

Revision Date 2015-08-12

Specific target organ systemic toxicity - repeated exposure,
Category 2, Liver, thymus, Bone marrow
Aspiration hazard, Category 1

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.

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.
P280 Wear protective gloves/eye protection/face protection.
P281 Use personal protective equipment as required.

Response:
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician 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 Take off contaminated clothing and wash before reuse.
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.

Disposal:
Diesel PC-9-HS Test Fuel

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
Confirmed animal carcinogen with unknown relevance to humans

Diesel fuel 68476-34-6

SECTION 3: Composition/information on ingredients

Molecular formula : Mixture

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diesel fuel</td>
<td>68476-34-6</td>
<td>100</td>
</tr>
</tbody>
</table>

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. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

SECTION 5: Firefighting measures

Flash point : 60.6 °C (141.1 °F)
Method: ASTM D 93

Autoignition temperature : No data available

Suitable extinguishing media : Alcohol-resistant foam. Carbon dioxide (CO2). Dry chemical.
**Diesel PC-9-HS Test Fuel**

**Version 3.3**

**Revision Date 2015-08-12**

<table>
<thead>
<tr>
<th>Unsuitable extinguishing media</th>
<th>:</th>
<th>High volume water jet.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific hazards during fire fighting</td>
<td>:</td>
<td>Do not allow run-off from fire fighting to enter drains or water courses.</td>
</tr>
<tr>
<td>Special protective equipment for fire-fighters</td>
<td>:</td>
<td>Wear self-contained breathing apparatus for firefighting if necessary.</td>
</tr>
<tr>
<td>Further information</td>
<td>:</td>
<td>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.</td>
</tr>
<tr>
<td>Fire and explosion protection</td>
<td>:</td>
<td>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.</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>:</td>
<td>Hydrocarbons. Carbon oxides.</td>
</tr>
</tbody>
</table>

**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). |

**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. |

**MSDS Number:100000001030**

4/14
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

Ingredients with workplace control parameters

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Basis</th>
<th>Value</th>
<th>Control parameters</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diesel fuel</td>
<td>ACGIH</td>
<td>TWA</td>
<td>100 mg/m³</td>
<td>A3, Skin, varies, Inhalable fraction and vapor</td>
</tr>
</tbody>
</table>

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 workplace 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 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.
**Diesel PC-9-HS Test Fuel**

**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 antistatic protective clothing. Workers should wear antistatic footwear. Skin should be washed after contact.

**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 40 °C (104 °F) (101.30 kPa)
- **Color** : Pale yellow to brown (if undyed), red to purple (dyed)
- **Odor** : Mild

**Safety data**
- **Flash point** : 60.6 °C (141.1 °F)
  Method: ASTM D 93
- **Lower explosion limit** : No data available
- **Upper explosion limit** : No data available
- **Oxidizing properties** : no
- **Autoignition temperature** : No data available
- **Molecular formula** : Mixture
- **Molecular weight** : Not applicable
- **pH** : Not applicable
- **Pour point** : -23 °C (-9 °F)
  Method: ASTM D97
- **Boiling point/boiling range** : 168 - 354 °C (334 - 669 °F)
- **Vapor pressure** : 13.00 kPa at 40 °C (104 °F)
  Method: ASTM D5191
- **Relative density** : 0.87 at 16 °C (61 °F)
- **Density** : 0.8471 g/cm3
  Method: ASTMD 4052
- **Water solubility** : Negligible
Diesel PC-9-HS Test Fuel

Partition coefficient: n-octanol/water : No data available
Viscosity, kinematic : 2.4 cSt
at 40 °C (104 °F)
Method: ASTM D 445
Relative vapor density : No data available
Evaporation rate : No data available

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.

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.

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

Acute inhalation toxicity
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

MSDS Number:100000001030
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
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
## Diesel PC-9-HS Test Fuel

### 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.

### 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

**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.
Diesel PC-9-HS Test Fuel

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 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),
Diesel PC-9-HS Test Fuel

VERSION 3.3

Revision Date 2015-08-12

9, III, (60.6 °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

National legislation

SARA 311/312 Hazards : Fire Hazard
Acute Health Hazard
Chronic Health Hazard

CERCLA Reportable Quantity : This material does not contain any components with a CERCLA RQ.

SARA 302 Reportable Quantity : This material does not contain any components with a SARA 302 RQ.

SARA 302 Threshold Planning Quantity : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 304 Reportable Quantity : This material does not contain any components with a section 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

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 12 (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 : Diesel fuel - 68476-34-6

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

United States of America 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
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
NFPA Classification: Health Hazard: 2
Fire Hazard: 2
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.

<table>
<thead>
<tr>
<th>Key or legend to abbreviations and acronyms used in the safety data sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
</tr>
<tr>
<td>AICS</td>
</tr>
<tr>
<td>DSL</td>
</tr>
<tr>
<td>NDSL</td>
</tr>
<tr>
<td>CNS</td>
</tr>
<tr>
<td>CAS</td>
</tr>
<tr>
<td>EC50</td>
</tr>
<tr>
<td>EC50</td>
</tr>
<tr>
<td>EGEST</td>
</tr>
<tr>
<td>EOSCA</td>
</tr>
<tr>
<td>EINECS</td>
</tr>
<tr>
<td>MAK</td>
</tr>
<tr>
<td>GHS</td>
</tr>
<tr>
<td>&gt;=</td>
</tr>
<tr>
<td>IC50</td>
</tr>
<tr>
<td>IARC</td>
</tr>
<tr>
<td>IECSC</td>
</tr>
<tr>
<td>ENCS</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

MSDS Number: 100000001030
<table>
<thead>
<tr>
<th>KECl</th>
<th>Korea, Existing Chemical Inventory</th>
<th>UVCB</th>
<th>Unknown or Variable Composition, Complex Reaction Products, and Biological Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;=</td>
<td>Less Than or Equal To</td>
<td>WHMIS</td>
<td>Workplace Hazardous Materials Information System</td>
</tr>
<tr>
<td>LC50</td>
<td>Lethal Concentration 50%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>