

# Safety Data Sheet



<b>SECTION 1 PRODUCT AND COMPANY IDENTIFICATION</b>
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## DIESEL FUEL No. 2

**Product Use:** Fuel [See Section 16 for Additional Product Numbers]

**Synonyms:** 15 S Diesel Fuel 2; Alternative Low Aromatic Diesel (ALAD); CAL ULS S R6-20 B0-5 DF2; CAL ULS S R6-20 B0-5 DF2DY; Calco LS Diesel 2; CALCO ULS C-B0-B5 DF2; CALCO ULS C-B0-B5 DF2 DYED; CALCO ULS C-B2 DF2; CALCO ULS C-B2 DF2 DYED; CALCO ULS C-B5 DF2; CALCO ULS C-B5 DF2 DYED; Calco ULS DF2; Calco ULS Diesel 2; CALCO ULS S R6-20 DF2; CALCO ULS S R6-20 DF2 DYED; CALCO ULS S-B0-B5 DF2 DYED; Calco ULS S-B5 DF2; Calco ULS S-B5 DF2 DYED; CALCO ULS TC-B1 DF2; CALCO ULS TC-B1 DF2 DYED; CALCO ULS TC-B2 DF2; CALCO ULS TC-B2 DF2 DYED; CALCO ULS TC-B3 DF2; CALCO ULS TC-B3 DF2 DYED; CALCO ULS TC-B4 DF2; CALCO ULS TC-B4 DF2 DYED; CALCO ULS TC-B5 DF2; CALCO ULS TC-B5 DF2 DYED; CALCO ULS TX-B1 DF2; CALCO ULS TX-B1 DF2 DYED; CALCO ULS TX-B2 DF2; CALCO ULS TX-B2 DF2 DYED; CALCO ULS TX-B3 DF2; CALCO ULS TX-B3 DF2 DYED; CALCO ULS TX-B4 DF2; CALCO ULS TX-B4 DF2 DYED; CALCO ULS TX-B5 DF2; CALCO ULS TX-B5 DF2 DYED; Chevron LS Diesel 2; Chevron ULS Diesel 2; CT ULS C-B0-B5 DF2; CT ULS C-B0-B5 DF2 DYED; CT ULS C-B2 DF2; CT ULS C-B5 DF2; CT ULS S R6-20 B0-5 DF2; CT ULS S R6-20 DF2; CT ULS S R6-20 DF2 DYED; CT ULS S-B0-B5 DF2 DYED; CT ULS S-B5 DF2; CT ULS S-B5 DF2 DYED; CT ULS S-BO-B5 DF2; CT ULS SPECIAL DF2 DYED; CT ULS TC-B1 DF2; CT ULS TC-B2 DF2; CT ULS TC-B3 DF2; CT ULS TC-B4 DF2; CT ULS TC-B5 DF2; CT ULS TX-B1 DF2; CT ULS TX-B2 DF2; CT ULS TX-B3 DF2; CT ULS TX-B4 DF2; CT ULS TX-B5 DF2; Diesel Fuel Oil; Diesel Grade No. 2; Diesel No. 2-D S15; Diesel No. 2-D S500; Diesel No. 2-D S5000; Distillates, straight run; Gas Oil; HS Diesel 2; HS Heating Fuel 2; Light Diesel Oil Grade No. 2-D; LS Diesel 2; LS Heating Fuel 2; Marine Diesel; RR Diesel Fuel; Texaco Diesel; Texaco Diesel No. 2; ULS C-B0-B5 DF2; ULS C-B0-B5 DF2 DYED; ULS C-B2 DF2; ULS C-B2 DF2 DYED; ULS C-B5 DF2; ULS C-B5 DF2 DYED; ULS S R6-20 B0-5 DF2; ULS S R6-20 B0-5 DF2 DYED; ULS S R6-20 DF2; ULS S R6-20 DF2 DYED; ULS S-B0-B5 DF2 DYED; ULS S-B5 DF2; ULS S-BO-B5 DF2; ULS TC-B1 DF2; ULS TC-B1 DF2 DYED; ULS TC-B2 DF2; ULS TC-B2 DF2 DYED; ULS TC-B3 DF2; ULS TC-B3 DF2 DYED; ULS TC-B4 DF2; ULS TC-B4 DF2 DYED; ULS TC-B5 DF2; ULS TC-B5 DF2 DYED; ULS TX-B1 DF2; ULS TX-B1 DF2 DYED; ULS TX-B3 DF2; ULS TX-B3 DF2 DYED; ULS TX-B4 DF2; ULS TX-B4 DF2 DYED; ULS TX-B5 DF2; ULS TX-B5 DF2 DYED; Ultra Low Sulfur Diesel 2

**Company Identification**

Chevron Products Company  
6001 Bollinger Canyon Rd.  
San Ramon, CA 94583  
United States of America

### Transportation Emergency Response

CHEMTREC: (800) 424-9300 or (703) 527-3887

### Health Emergency

Chevron Emergency Information Center: Located in the USA. International collect calls accepted. (800) 231-0623 or (510) 231-0623

### Product Information

Product Information: (800) 582-3835

SDS Requests: [lubemsds@chevron.com](mailto:lubemsds@chevron.com)

SPECIAL NOTES: This SDS covers all Chevron, Texaco and Calco CARB & non-CARB Diesel No. 2 Fuels. The sulfur content is less than 0.5% (mass). Red dye is added to non-taxable fuel. (SDS 6894)

SPECIAL NOTES: This SDS covers all Chevron and Calco CARB Low Sulfur Diesel No. 2 Fuels. Red dye is added to non-taxable fuel. (SDS 7098)

## SECTION 2 HAZARDS IDENTIFICATION

**CLASSIFICATION:** Flammable liquid: Category 3. Aspiration toxicant: Category 1. Carcinogen: Category 1B. Skin irritation: Category 2. Target organ toxicant (repeated exposure): Category 2. Target organ toxicant (central nervous system): Category 3. Acute inhalation toxicant: Category 4. Acute aquatic toxicant: Category 2. Chronic aquatic toxicant: Category 2.



**Signal Word:** Danger

**Physical Hazards:** Flammable liquid and vapor.

**Health Hazards:** May be fatal if swallowed and enters airways. May cause cancer. Causes skin irritation. Harmful if inhaled. May cause drowsiness or dizziness.

**Target Organs:** May cause damage to organs (Blood/Blood Forming Organs, Liver, Thymus) through prolonged or repeated exposure.

**Environmental Hazards:** Toxic to aquatic life with long lasting effects.

### PRECAUTIONARY STATEMENTS:

**General:** Keep out of reach of children. Read label before use.

**Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. -- No smoking.

Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use explosion-proof electrical/ventilating/lighting/equipment. Do not breathe dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required. Wash thoroughly after handling. Avoid release to the environment.

**Response:** IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF ON SKIN (or hair): Take off immediately all contaminated clothing and wash it before reuse. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse. IF SWALLOWED: Immediately call a poison center or doctor/physician. Do NOT induce vomiting. Call a poison center or doctor/physician if you feel unwell. In case of fire: Use media specified in the SDS to extinguish. Specific treatment (see Notes to Physician on this label). Collect spillage.

**Storage:** Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

**Disposal:** Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

**HAZARDS NOT OTHERWISE CLASSIFIED:** Not Applicable

**SECTION 3 COMPOSITION/ INFORMATION ON INGREDIENTS**

COMPONENTS	CAS NUMBER	AMOUNT
Diesel Fuel No. 2	68476-34-6	95 - 100 %vol/vol
Renewable Diesel	Mixture	0 - 20 %vol/vol
Fatty Acid Methyl Esters (FAME)	Mixture	0 - 5 %vol/vol
Naphthalene	91-20-3	0.02 - 0.2 %vol/vol
Total sulfur	Mixture	0 - 5000 ppm (weight)

**SECTION 4 FIRST AID MEASURES**

**Description of first aid measures**

**Eye:** No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water.

**Skin:** Wash skin with water immediately and remove contaminated clothing and shoes. Get medical attention if any symptoms develop. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

**Ingestion:** If swallowed, get immediate medical attention. Do not induce vomiting. Never give anything by mouth to an unconscious person.

**Inhalation:** Move the exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if breathing difficulties continue or if any other symptoms develop.

**Most important symptoms and effects, both acute and delayed**

**IMMEDIATE HEALTH EFFECTS**

**Eye:** Not expected to cause prolonged or significant eye irritation.

**Skin:** Contact with the skin causes irritation. Symptoms may include pain, itching, discoloration, swelling, and blistering. Contact with the skin is not expected to cause an allergic skin response.

**Ingestion:** Highly toxic; may be fatal if swallowed. Because of its low viscosity, this material can directly enter the lungs, if swallowed, or if subsequently vomited. Once in the lungs it is very difficult to remove and can cause severe injury or death. May be irritating to mouth, throat, and stomach. Symptoms may include pain, nausea, vomiting, and diarrhea.

**Inhalation:** The vapor or fumes from this material may cause respiratory irritation. Mists of this material may cause respiratory irritation. Symptoms of respiratory irritation may include coughing and difficulty breathing. Excessive or prolonged breathing of this material may cause central nervous system effects. Central nervous system effects may include headache, dizziness, nausea, vomiting, weakness, loss of coordination, blurred vision, drowsiness, confusion, or disorientation. At extreme exposures, central nervous system effects may include respiratory depression, tremors or convulsions, loss of consciousness, coma or death.

**DELAYED OR OTHER HEALTH EFFECTS:**

**Cancer:** Whole diesel engine exhaust has been classified as a Group 2A carcinogen (probably carcinogenic to humans) by the International Agency for Research on Cancer (IARC). Prolonged or repeated exposure to this material may cause cancer. Contains naphthalene, which has been classified as a Group 2B carcinogen (possibly carcinogenic to humans) by the International Agency for Research on Cancer (IARC).

**Target Organs:** Contains material that may cause damage to the following organ(s) following repeated inhalation at concentrations above the recommended exposure limit based on animal data: Liver  
Blood/Blood Forming Organs Thymus Risk depends on duration and level of exposure. See Section 11 for additional information.

**Indication of any immediate medical attention and special treatment needed**

**Note to Physicians:** Ingestion of this product or subsequent vomiting may result in aspiration of light hydrocarbon liquid, which may cause pneumonitis.

**SECTION 5 FIRE FIGHTING MEASURES**

**EXTINGUISHING MEDIA:** Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

**Unusual Fire Hazards:** See Section 7 for proper handling and storage.

**PROTECTION OF FIRE FIGHTERS:**

**Fire Fighting Instructions:** For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

**Combustion Products:** Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion.



## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Protective Measures:** Eliminate all sources of ignition in the vicinity of the spill or released vapor. If this material is released into the work area, evacuate the area immediately. Monitor area with combustible gas indicator.

**Spill Management:** Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. All equipment used when handling the product must be grounded. A vapor suppressing foam may be used to reduce vapors. Use clean non-sparking tools to collect absorbed material. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

**Reporting:** Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate or required.

## SECTION 7 HANDLING AND STORAGE

**General Handling Information:** Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

**Precautionary Measures:** Liquid evaporates and forms vapor (fumes) which can catch fire and burn with explosive force. Invisible vapor spreads easily and can be set on fire by many sources such as pilot lights, welding equipment, and electrical motors and switches.

Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Do not breathe vapor or fumes. Do not breathe mist. Wash thoroughly after handling. Keep out of the reach of children.

**Unusual Handling Hazards:** WARNING! Do not use as portable heater or appliance fuel. Toxic fumes may accumulate and cause death. Slow heat generation may occur with oil-soaked rags, spent filter aids and spent absorbent material and may cause spontaneous combustion if stored near combustibles and not handled properly. Store biodiesel soaked rags, filter aids, and spill absorbent material in approved safety disposal containers and dispose of properly. Biodiesel soaked rags may be washed with soap and water and allowed to dry in well ventilated area.

**Static Hazard:** Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures.

**Container Warnings:** Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

**General Storage Information:** DO NOT USE OR STORE near heat, sparks, flames, or hot surfaces . USE AND STORE ONLY IN WELL VENTILATED AREA. Keep container closed when not in use.

**SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION**

**GENERAL CONSIDERATIONS:**

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.

**ENGINEERING CONTROLS:**

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below the recommended exposure limits.

**PERSONAL PROTECTIVE EQUIPMENT**

**Eye/Face Protection:** No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

**Skin Protection:** Wear protective clothing to prevent skin contact. Selection of protective clothing may include gloves, apron, boots, and complete facial protection depending on operations conducted.

Suggested materials for protective gloves include: Chlorinated Polyethylene (or Chlorosulfonated Polyethylene), Nitrile Rubber, Polyurethane, Viton.

**Respiratory Protection:** Determine if airborne concentrations are below the recommended occupational exposure limits for jurisdiction of use. If airborne concentrations are above the acceptable limits, wear an approved respirator that provides adequate protection from this material, such as: Air-Purifying Respirator for Organic Vapors.

When used as a fuel, this material can produce carbon monoxide in the exhaust. Determine if airborne concentrations are below the occupational exposure limit for carbon monoxide. If not, wear an approved positive-pressure air-supplying respirator.

Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

**Occupational Exposure Limits:**

Component	Agency	TWA	STEL	Ceiling	Notation
Total sulfur	Not Applicable	--	--	--	--
Diesel Fuel No. 2	ACGIH	100 mg/m3	--	--	Skin A3 total hydrocarbon
Diesel Fuel No. 2	CVX	100 mg/m3	--	--	Skin total hydrocarbon

Renewable Diesel	Not Applicable	--	--	--	--
Fatty Acid Methyl Esters (FAME)	Not Applicable	--	--	--	--
Naphthalene	ACGIH	10 ppm (weight)	15 ppm	--	Skin A3
Naphthalene	OSHA Z-1	50 mg/m3	--	--	--

Consult local authorities for appropriate values.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**Attention: the data below are typical values and do not constitute a specification.**

**Color:** Varies depending on specification

**Physical State:** Liquid

**Odor:** Petroleum odor

**Odor Threshold:** No data available

**pH:** Not Applicable

**Vapor Pressure:** 0.04 kPa (Approximate) @ 40 °C (104 °F)

**Vapor Density (Air = 1):** >1

**Initial Boiling Point:** 175.6°C (348.1°F) - 370°C (698°F)

**Solubility:** Soluble in hydrocarbons; insoluble in water

**Freezing Point:** Not Applicable

**Melting Point:** Not Applicable

**Specific Gravity:** 0.80 - 0.88 @ 15.6°C (60.1°F) (Typical)

**Density:** No data available

**Viscosity:** 1.90 cSt - 4.10 cSt @ 40°C (104°F)

**Coefficient of Therm. Expansion / °F:** No data available

**Evaporation Rate:** No data available

**Decomposition temperature:** No data available

**Octanol/Water Partition Coefficient:** No data available

### FLAMMABLE PROPERTIES:

**Flammability (solid, gas):** No Data Available

**Flashpoint:** (Pensky-Martens Closed Cup) 52 °C (125 °F) Minimum

**Autoignition:** 257 °C (494 °F)

**Flammability (Explosive) Limits (% by volume in air):** Lower: 0.6 Upper: 4.7

## SECTION 10 STABILITY AND REACTIVITY

**Reactivity:** May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

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

**Conditions to Avoid:** Avoid contact with heat, sparks, fire and oxidizing agents

**Incompatibility With Other Materials:** Not applicable

**Hazardous Decomposition Products:** None known (None expected)

**Hazardous Polymerization:** Hazardous polymerization will not occur.

## SECTION 11 TOXICOLOGICAL INFORMATION

### Information on toxicological effects

**Serious Eye Damage/Irritation:** The eye irritation hazard is based on evaluation of data for similar materials.

**Skin Corrosion/Irritation:** The skin irritation hazard is based on evaluation of data for similar materials.

**Skin Sensitization:** The skin sensitization hazard is based on evaluation of data for similar materials.

**Acute Dermal Toxicity:** The acute dermal toxicity hazard is based on evaluation of data for similar materials.

**Acute Oral Toxicity:** The acute oral toxicity hazard is based on evaluation of data for similar materials.

**Acute Inhalation Toxicity:** The acute inhalation toxicity hazard is based on evaluation of data for similar materials.

**Acute Toxicity Estimate (inhalation):** 1.2 mg/l

**Germ Cell Mutagenicity:** The hazard evaluation is based on data for components or a similar material.

**Carcinogenicity:** The hazard evaluation is based on data for components or a similar material. Whole diesel engine exhaust has been classified as a Group 2A carcinogen (probably carcinogenic to humans) by the International Agency for Research on Cancer (IARC). Contains naphthalene, which has been classified as a Group 2B carcinogen (possibly carcinogenic to humans) by the International Agency for Research on Cancer (IARC).

**Reproductive Toxicity:** The hazard evaluation is based on data for components or a similar material.

**Specific Target Organ Toxicity - Single Exposure:** The hazard evaluation is based on data for components or a similar material.

**Specific Target Organ Toxicity - Repeated Exposure:** The hazard evaluation is based on data for components or a similar material.

### ADDITIONAL TOXICOLOGY INFORMATION:

This product contains gas oils.

CONCAWE (product dossier 95/107) has summarized current health, safety and environmental data available for a number of gas oils, typically hydrodesulfurized middle distillates, CAS 64742-80-9, straight-run middle distillates, CAS 64741-44-2, and/or light cat-cracked distillate CAS 64741-59-9.

CARCINOGENICITY: All materials tested have caused the development of skin tumors in mice, but all



featured severe skin irritation and sometimes a long latency period before tumors developed. Straight-run and cracked gas oil samples were studied to determine the influence of dermal irritation on the carcinogenic activity of middle distillates. At non-irritant doses the straight-run gas oil was not carcinogenic, but at irritant doses, weak activity was demonstrated. Cracked gas oils, when diluted with mineral oil, demonstrated carcinogenic activity irrespective of the occurrence of skin irritation. Gas oils were tested on male mice to study tumor initiating/promoting activity. The results demonstrated that while a straight-run gas oil sample was neither an initiator or promotor, a blend of straight-run and FCC stock was both a tumor initiator and a promoter.

**GENOTOXICITY:** Hydrotreated & hydrodesulfurized gas oils range in activity from inactive to weakly positive in in-vitro bacterial mutagenicity assays. Mouse lymphoma assays on straight-run gas oils without subsequent hydrodesulphurization gave positive results in the presence of S9 metabolic activation. In-vivo bone marrow cytogenetics and sister chromatic exchange assay exhibited no activity for straight-run components with or without hydrodesulphurization. Thermally or catalytically cracked gas oils tested with in-vitro bacterial mutagenicity assays in the presence of S9 metabolic activation were shown to be mutagenic. In-vitro sister chromatic exchange assays on cracked gas oil gave equivocal results both with and without S9 metabolic activation. In-vivo bone marrow cytogenetics assay was inactive for two cracked gas oil samples. Three hydrocracked gas oils were tested with in-vitro bacterial mutagenicity assays with S9, and one of the three gave positive results. Twelve distillate fuel samples were tested with in-vitro bacterial mutagenicity assays & with S9 metabolic activation and showed negative to weakly positive results. In one series, activity was shown to be related to the PCA content of samples tested. Two in-vivo studies were also conducted. A mouse dominant lethal assay was negative for a sample of diesel fuel. In the other study, 9 samples of No 2 heating oil containing 50% cracked stocks caused a slight increase in the number of chromosomal aberrations in bone marrow cytogenetics assays. **DEVELOPMENTAL TOXICITY:** Diesel fuel vapor did not cause fetotoxic or teratogenic effects when pregnant rats were exposed on days 6-15 of pregnancy. Gas oils were applied to the skin of pregnant rats daily on days 0-19 of gestation. All but one (coker light gas oil) caused fetotoxicity (increased resorptions, reduced litter weight, reduced litter size) at dose levels that were also maternally toxic.

The National Institute of Occupational Safety and Health (NIOSH) has recommended that whole diesel exhaust be regarded as potentially causing cancer. This recommendation was based on test results showing increased lung cancer in laboratory animals exposed to whole diesel exhaust.

This product contains naphthalene.

**GENERAL TOXICITY:** Exposure to naphthalene has been reported to cause methemoglobinemia and/or hemolytic anemia, especially in humans deficient in the enzyme glucose-6-phosphate dehydrogenase. Laboratory animals given repeated oral doses of naphthalene have developed cataracts.

**REPRODUCTIVE TOXICITY AND BIRTH DEFECTS:** Naphthalene did not cause birth defects when administered orally to rabbits, rats, and mice during pregnancy, but slightly reduced litter size in mice at dose levels that were lethal to the pregnant females. Naphthalene has been reported to cross the human placenta. **GENETIC TOXICITY:** Naphthalene caused chromosome aberrations and sister chromatid exchanges in Chinese hamster ovary cells, but was not a mutagen in several other in-vitro tests. **CARCINOGENICITY:** In a study conducted by the National Toxicology Program (NTP), mice exposed to 10 or 30 ppm of naphthalene by inhalation daily for two years had chronic inflammation of the nose and lungs and increased incidences of metaplasia in those tissues. The incidence of benign lung tumors (alveolar/bronchiolar adenomas) was significantly increased in the high-dose female group but not in the

male groups. In another two-year inhalation study conducted by NTP, exposure of rats to 10, 30, and 60 ppm naphthalene caused increases in the incidences of a variety of nonneoplastic lesions in the nose. Increases in nasal tumors were seen in both sexes, including olfactory neuroblastomas in females at 60 ppm and adenomas of the respiratory epithelium in males at all exposure levels. The relevance of these effects to humans has not been established. No carcinogenic effect was reported in a 2-year feeding study in rats receiving naphthalene at 41 mg/kg/day.

**SECTION 12 ECOLOGICAL INFORMATION**

**ECOTOXICITY**

A series of studies on the acute toxicity of 4 diesel fuel samples were conducted by one laboratory using water accommodated fractions. The range of effective (EC50) or lethal concentrations (LC50) expressed as loading rates were: This material is expected to be toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment.

- 72 hour(s) EC50: 2.6-25 mg/l (Selenastrum capricornutum)
- 96 hour(s) LC50: 21-210 mg/l (Salmo gairdneri)
- 48 hour(s) EC50: 20-210 mg/l (Daphnia magna)

**MOBILITY**

No data available.

**PERSISTENCE AND DEGRADABILITY**

This material is not expected to be readily biodegradable. On release to the environment the lighter components of diesel fuel will generally evaporate but depending on local environmental conditions (temperature, wind, mixing or wave action, soil type, etc.) the remainder may become dispersed in the water column or absorbed to soil or sediment. Diesel fuel would not be expected to be readily biodegradable. In a modified Strum test (OECD method 301B) approximately 40% biodegradation was recorded over 28 days. However, it has been shown that most hydrocarbon components of diesel fuel are degraded in soil in the presence of oxygen. Under anaerobic conditions, such as in anoxic sediments, rates of biodegradation are negligible.

The product has not been tested. The statement has been derived from products of a similar structure and composition.

**POTENTIAL TO BIOACCUMULATE**

- Bioconcentration Factor: No data available.
- Octanol/Water Partition Coefficient: No data available

**SECTION 13 DISPOSAL CONSIDERATIONS**

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 international, country, or local laws and regulations.

## SECTION 14 TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

**DOT Shipping Description:** For packages with an Initial Boiling Point > 35 deg C and a Flash Point (PM Closed Cup) >= 23 deg C but <= 60 deg C: UN1202, GAS OIL, 3, III; OPTIONAL DISCLOSURE: UN1202, GAS OIL, 3, III, MARINE POLLUTANT (DIESEL FUEL) Optional disclosure per 49 CFR when Flash Point (PM Closed Cup) >= 38 deg C < 93 deg C per 49 173.150 (f): UN1202, GAS OIL, COMBUSTIBLE LIQUID, III; NON-BULK PACKAGES ARE EXEMPTED FROM THE PROVISIONS OF 49 CFR IN USA JURISDICTIONS Optional disclosure as a GHS Environmental Hazard/Marine Pollutant when Flash Point (PM Closed Cup) > 60 deg C: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(DIESEL FUEL), 9, III, MARINE POLLUTANT (DIESEL FUEL)

**IMO/IMDG Shipping Description:** For packages with an Initial Boiling Point > 35 deg C and a Flash Point (PM Closed Cup) >= 23 deg C, <= 60 deg C: UN1202, GAS OIL, 3, III, FLASH POINT SEE SECTION 5 OR 9, MARINE POLLUTANT (DIESEL FUEL); OPTIONAL DISCLOSURE: UN1268, PETROLEUM DISTILLATES, N.O.S. (DIESEL FUEL), 3, III, FLASH POINT SEE SECTION 5 OR 9, MARINE POLLUTANT (DIESEL FUEL) For packages with a Flash Point (PM Closed Cup) > 60 deg C: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DIESEL FUEL), 9, III, MARINE POLLUTANT (DIESEL FUEL)

**ICAO/IATA Shipping Description:** For packages with an Initial Boiling Point > 35 deg C and a Flash Point (PM Closed Cup) >= 23 deg C, <= 60 deg C: UN1202, GAS OIL, 3, III For packages with a Flash Point (PM Closed Cup) > 60 deg C: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DIESEL FUEL), 9, III, MARINE POLLUTANT (DIESEL FUEL)

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:**  
Not applicable

## SECTION 15 REGULATORY INFORMATION

<b>EPCRA 311/312 CATEGORIES:</b>	1. Immediate (Acute) Health Effects:	YES
	2. Delayed (Chronic) Health Effects:	YES
	3. Fire Hazard:	YES
	4. Sudden Release of Pressure Hazard:	NO
	5. Reactivity Hazard:	NO

REGULATORY LISTS SEARCHED:

01-1=IARC Group 1

03=EPCRA 313

01-2A=IARC Group 2A	04=CA Proposition 65
01-2B=IARC Group 2B	05=MA RTK
02=NTP Carcinogen	06=NJ RTK
	07=PA RTK

The following components of this material are found on the regulatory lists indicated.

Diesel Fuel No. 2	07
Naphthalene	01-2B, 02, 04, 06

**CERCLA REPORTABLE QUANTITIES(RQ)/EPCRA 302 THRESHOLD PLANNING QUANTITIES(TPQ):**

Component	Component RQ	Component TPQ	Product RQ
Naphthalene	100 lbs	None	40000 lbs

**CHEMICAL INVENTORIES:**

All components comply with the following chemical inventory requirements: AICS (Australia), DSL (Canada), EINECS (European Union), IECSC (China), KECI (Korea), PICCS (Philippines), TCSI (Taiwan), TSCA (United States).

**NEW JERSEY RTK CLASSIFICATION:**

Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A. 34:5A-1 et. seq., the product is to be identified as follows: DIESEL FUEL

**SECTION 16 OTHER INFORMATION**

**NFPA RATINGS:** Health: 1 Flammability: 2 Reactivity: 0

**HMIS RATINGS:** Health: 2\* Flammability: 2 Reactivity: 0  
 (0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, \*- Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

**Additional Product Number(s):** 203408, 203410, 203413, 203417, 203431, 203436, 203437, 203441, 203443, 203447, 203449, 203450, 203477990, 203480990, 203481990, 203482990, 203483990, 203484990, 203485990, 203486990, 203487990, 203488990, 203489990, 220122, 225114, 225115, 225150, 266176, 270000, 270005, 270030, 270031, 270032, 270033, 270034, 270040, 270041, 270042, 270043, 270044, 270045, 270046, 270047, 270048, 270049, 270050, 270051, 270052, 270053, 270054, 270058, 270059, 270060, 270062, 270063, 270064, 270065, 270068, 270069, 270070, 270081, 270082, 270083, 270084, 270085, 270086, 270087, 270088, 270089, 270090, 270091, 270094, 270095, 270096, 270100, 270101, 270102, 270103, 270104, 270105, 270106, 270107, 270108, 270109, 270110, 270111,

270112, 270113, 270114, 270115, 270116, 270117, 270118, 270119, 270120, 270121, 270122, 270123, 270124, 271006, 272006, 272007, 272008, 272009, 272010, 272011, 272012, 272013, 272093, 272102, 272126, 272129, 272130, 272131, 272152, 272185, 272190, 272195, 272593, 272601, 272602, 272693, 272793, 273003, 273030, 273053, 275000

**REVISION STATEMENT:**

SECTION 15 - Regulatory Information information was modified.

SECTION 16 - Product Code(s) information was modified.

**Revision Date:** February 23, 2017

**ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:**

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	PEL - Permissible Exposure Limit
GHS - Globally Harmonized System	CAS - Chemical Abstract Service Number
ACGIH - American Conference of Governmental Industrial Hygienists	IMO/IMDG - International Maritime Dangerous Goods Code
API - American Petroleum Institute	SDS - Safety Data Sheet
HMIS - Hazardous Materials Information System	NFPA - National Fire Protection Association (USA)
DOT - Department of Transportation (USA)	NTP - National Toxicology Program (USA)
IARC - International Agency for Research on Cancer	OSHA - Occupational Safety and Health Administration
NCEL - New Chemical Exposure Limit	EPA - Environmental Protection Agency
SCBA - Self-Contained Breathing Apparatus	

Prepared according to the 29 CFR 1910.1200 (2012) by Chevron Energy Technology Company, 6001 Bollinger Canyon Road, San Ramon, CA 94583.

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.