

**TrusTec™ Diesel Reference Fuel U-36**

Version 6.9

Revision Date 2025-10-03

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

Product Name : TrusTec™ Diesel Reference Fuel U-36
Material : 1108915, 1024281, 1024280, 1032195, 1024277, 1024279, 1024278
Use : Reference Fuel
Uses advised against : This material should not be used for purposes other than the identified uses in section 1 without expert advice.

Company : Chevron Phillips Chemical Company LP
Specialty Chemicals
9500 Lakeside Blvd.
The Woodlands, TX 77381

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)

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Italy: POISON CENTER MILAN – Azienda Ospedaliera Niguarda Ca` Grande Tel. +39 02 66101029; POISON CENTER ROME – Policlinico “Agostino Gemelli”, Servizio di tossicologia clinica Tel. +39 06 3054343; POISON CENTER ROME – Ospedale Pediatrico Bambino Gesù Tel. +39 06 68593726; POISON CENTER ROME – Policlinico “Umberto I” Tel. +39 06 4997 8000; POISON CENTER FOGGIA – Azienda Ospedaliera Universitaria Riuniti Tel. +39 0881 732326; POISON CENTER NAPLES – Azienda Ospedaliera “Antonio Cardarelli” Tel. +39 081 7472870; POISON CENTER FLORENCE – Azienda Ospedaliera universitaria Careggi Tel. +39 055 7947819; POISON CENTER PAVIA – IRCCS Fondazione Salvatore Maugeri Tel. +39 0382 24444; POISON CENTER BERGAMO – Azienda Ospedaliera “Papa Giovanni XXIII” Tel. 800 883 300; POISON CENTER VERONA – Azienda Ospedaliera Universitaria integrata Tel. 800 011 858;

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)

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

Organization that prepared the SDS : 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 3
 Skin irritation, Category 2
 Carcinogenicity, Category 1B
 Specific target organ toxicity - repeated exposure, Category 2,
 Blood, Liver, thymus gland
 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.

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H315: Causes skin irritation.
 H350: May cause cancer.
 H373: May cause damage to organs (Blood, Liver, thymus gland) 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/ vapors/ spray.
 P264 Wash skin thoroughly after handling.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
 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.
 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 to extinguish.
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.

Potential Health Effects

Symptoms of Overexposure : No information available.

Carcinogenicity:**IARC**

Group 2A: Probably carcinogenic to humans
 Polynuclear Aromatics 130498-29-2
 Group 2B: Possibly carcinogenic to humans
 Light Cycle Oil 64741-59-9
 Naphthalene 91-20-3

NTP

Known to be human carcinogen
 Light Cycle Oil 64741-59-9
 Reasonably anticipated to be a human carcinogen

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Naphthalene 91-20-3
Polynuclear Aromatics 130498-29-2

SECTION 3: Composition/information on ingredients

Synonyms : Diesel Reference Fuel U

Molecular formula : Mixture

Component	CAS-No.	Weight %
Light Cycle Oil	64741-59-9	60 - 70
C12-C14 Isoalkanes	68551-19-9	30 - 40
Naphthalene	91-20-3	0 - 3.5
Polynuclear Aromatics	130498-29-2	0 - 0.7

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 : If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.

In case of skin contact : If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.

In case of eye contact : 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.

Notes to physician

Symptoms : No information available.

Risks : No information available.

Treatment : No information available.

SECTION 5: Firefighting measures

Flash point : 40°C (104°F)
Method: Tag closed cup

Autoignition temperature : No data available

Suitable extinguishing media : Alcohol-resistant foam. Carbon dioxide (CO2). Dry chemical.

Unsuitable extinguishing : High volume water jet.

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media

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 a naked flame or any 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 : 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).

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 a naked flame or any incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Keep away

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from open flames, hot surfaces and sources of ignition.

Storage

Requirements for storage : 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.

Uses advised against : This material should not be used for purposes other than the identified uses in section 1 without expert advice.

Use : Reference Fuel

SECTION 8: Exposure controls/personal protection**Ingredients with workplace control parameters****Chevron Phillips Chemical Company LP**

Components	Basis	Value	Control parameters	Note
C12-C14 Isoalkanes	Manufacturer	TWA	1,200 mg/m3	RCP,

RCP Reciprocal Calculation Procedure

US

Components	Basis	Value	Control parameters	Note
Naphthalene	ACGIH	TWA	10 ppm,	A3, Skin,
	ACGIH	STEL	15 ppm,	hematologic eff, URT irr, eye irr, eye dam, (), A4, Skin,
	OSHA Z-1	TWA	10 ppm, 50 mg/m3	
	OSHA Z-1-A	TWA	10 ppm, 50 mg/m3	
	OSHA Z-1-A	STEL	15 ppm, 75 mg/m3	

() Adopted values or notations enclosed are those for which changes are proposed in the NIC

A3 Confirmed animal carcinogen with unknown relevance to humans

A4 Not classifiable as a human carcinogen

eye dam Eye damage

eye irr Eye irritation

hematologic eff Hematologic effects

Skin Danger of cutaneous absorption

URT irr Upper Respiratory Tract irritation

Immediately Dangerous to Life or Health Concentrations (IDLH)

Substance name	CAS-No.	Control parameters	Update
Naphthalene	91-20-3	Immediately Dangerous to Life or Health Concentration Value 250 parts per million	1995-03-01

Biological exposure indices**US**

Substance name	CAS-No.	Control parameters	Sampling time	Update
Polynuclear Aromatics	130498-29-2	1-Hydroxypyrene: 2.5 µg/l Adjusted for the Pyrene to Benzo(a)pyrene ratio of the PAH mixture to which workers are exposed (Urine) Background () With hydrolyses ()	End of shift at end of workweek	2018-03-20
		3-hydroxybenzo(a)pyrene: Nonquantitative (Urine) With hydrolyses ()	End of shift at end of workweek	2018-03-20

Engineering measures

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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 : 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. Full-Face Air-Purifying Respirator for Organic Vapors, Dusts and Mists. 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 antistatic protective clothing. Workers should wear antistatic footwear.
- 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**

- Physical state : liquid
Color : Yellow
Odor : Mild

Safety data

- Flash point : 40°C (104°F)
Method: Tag closed cup
- Lower explosion limit : No data available

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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	: No data available
Boiling point/boiling range	: 164-314°C (327-597°F)
Vapor pressure	: No data available
Relative density	: 0.8613 at 15.6 °C (60.1 °F)
Density	: 0.8613 g/cm ³
Bulk density	: 7.19 L/G
Water solubility	: negligible
Partition coefficient: n-octanol/water	: No data available
Viscosity, kinematic	: 1.775 cSt at 40°C (104°F)
Relative vapor density	: 3 (Air = 1.0)
Evaporation rate	: < 1
Percent volatile	: > 99 %
Conductivity	: No data available

SECTION 10: Stability and reactivity

Reactivity : Stable under recommended storage conditions.

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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. Hazardous reactions: Vapors may form explosive mixture with air.
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	: Carbon oxides
Other data	: No decomposition if stored and applied as directed.

SECTION 11: Toxicological information**TrusTec™ Diesel Reference Fuel U-36**

Acute oral toxicity : Acute toxicity estimate: 3,572 mg/kg
Method: Calculation method

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Acute inhalation toxicity : Acute toxicity estimate: 6.64 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method

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Acute dermal toxicity : Acute toxicity estimate: > 2,000 mg/kg
Method: Calculation method

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Skin irritation : Skin irritation
largely based on animal evidence.

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Eye irritation : Vapors may cause irritation to the eyes, respiratory system and the skin.

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Sensitization : Does not cause skin sensitization.
Estimated based on individual component values.

Repeated dose toxicity

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Light Cycle Oil

: Species: Rat, males
 Sex: males
 Application Route: Dermal
 Dose: 0, 8, 25, 125, 500, 1250 mg/kg
 Exposure time: 90 day
 Number of exposures: 5 days/wk
 NOEL: 25 mg/kg
 Target Organs: Blood, Liver, Thymus

Species: Rat, females
 Sex: females
 Application Route: Dermal
 Dose: 0, 8, 25, 125, 500, 1250 mg/kg
 Exposure time: 90 day
 Number of exposures: 5 days/wk
 NOEL: 125 mg/kg
 Target Organs: Blood, Liver, Thymus

C12-C14 Isoalkanes

Species: Rat, male and female
 Sex: male and female
 Application Route: oral gavage
 Dose: 100, 500, 1000 mg/kg/d
 Exposure time: 13 wk
 Number of exposures: daily
 NOEL: > 1000 mg/kg/d
 Method: OECD Test Guideline 408
 No adverse effects expected
 Information given is based on data obtained from similar substances.

Species: Rat, male and female
 Sex: male and female
 Application Route: Inhalation
 Dose: 2600, 5200, 10400 mg/m³
 Exposure time: 90 d
 Number of exposures: 6 h/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

Light Cycle Oil

: Test Type: Modified Ames test
 Result: positive

Test Type: Mouse lymphoma assay
 Result: positive

Test Type: Sister Chromatid Exchange Assay
 Result: negative

C12-C14 Isoalkanes

Test Type: Ames test
 Metabolic activation: with and without metabolic activation
 Method: OECD Test Guideline 471
 Result: negative

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	Test Type: Mouse lymphoma assay Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative
	Test Type: Sister Chromatid Exchange Assay Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 479 Result: negative
Naphthalene	Test Type: Ames test Result: negative
	Test Type: Sister Chromatid Exchange Assay Result: negative
	Test Type: Unscheduled DNA synthesis assay Result: negative
Genotoxicity in vivo	
Light Cycle Oil	: Test Type: Cytogenetic assay Result: negative
C12-C14 Isoalkanes	Test Type: dominant lethal test Species: Rat Route of Application: Intraperitoneal injection Dose: 300, 900 ppm Method: OECD Test Guideline 478 Remarks: Information given is based on data obtained from similar substances.
Naphthalene	Test Type: Mouse micronucleus assay Result: negative

TrusTec™ Diesel Reference Fuel U-36**Carcinogenicity** : Remarks: May cause cancer.**Developmental Toxicity**

Light Cycle Oil	: Species: Rat Application Route: Dermal Dose: 1, 50, 250 mg/kg/d Number of exposures: once daily Test period: GD 0-19 Method: OECD Guideline 414 NOAEL Teratogenicity: 1 mg/kg NOAEL Maternal: 1 mg/kg
C12-C14 Isoalkanes	Species: Rat Application Route: Inhalation Dose: 0, 400, 1200 ppm Exposure time: 6h Test period: GD 6-15 NOAEL Teratogenicity: 1200 ppm NOAEL Maternal: 1200 ppm Information given is based on data obtained from similar substances.

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Species: Rat
 Application Route: Inhalation
 Dose: 300, 900 ppm
 Exposure time: 6h
 Test period: GD 6-15
 NOAEL Teratogenicity: ≥ 900 ppm
 NOAEL Maternal: ≥ 900 ppm
 Information given is based on data obtained from similar substances.

Naphthalene

Species: Rabbit
 Application Route: oral gavage
 Dose: 40, 200, 400 mg/kg
 Test period: 29 d, GD 6-18
 NOAEL Teratogenicity: 400 mg/kg

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

CMR effects

Light Cycle Oil : Carcinogenicity: Possible human carcinogen

C12-C14 Isoalkanes

Carcinogenicity: Not available
 Mutagenicity: Tests on bacterial or mammalian cell cultures did not show mutagenic effects., In vivo tests did not show mutagenic effects
 Teratogenicity: Animal testing did not show any effects on fetal development.
 Reproductive toxicity: Animal testing did not show any effects on fertility.

Naphthalene

Carcinogenicity: Limited evidence of carcinogenicity in animal studies

Polynuclear Aromatics

Carcinogenicity: Human carcinogen.
 Mutagenicity: In vivo tests showed mutagenic effects

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Further information : Solvents may degrease the skin.

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

Light Cycle Oil

: LL50: > 0.3 mg/l
 Exposure time: 96 h
 Species: Oncorhynchus mykiss (rainbow trout)
 semi-static test Method: OECD Test Guideline 203

C12-C14 Isoalkanes

LL50: $> 1,000$ mg/l
 Exposure time: 96 h
 Species: Oncorhynchus mykiss (rainbow trout)
 semi-static test Method: OECD Test Guideline 203
 Information given is based on data obtained from similar substances.

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Naphthalene LC50: 3.2 mg/l
Exposure time: 96 h
Species: Pimephales promelas (fathead minnow)

Toxicity to daphnia and other aquatic invertebrates

Light Cycle Oil : EL50: 0.32 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)
Immobilization Method: OECD Test Guideline 202

C12-C14 Isoalkanes EL50: > 1,000 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)
static test Method: OECD Test Guideline 202
Information given is based on data obtained from similar substances.

Naphthalene LC50: 2.16 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)

Toxicity to algae

Light Cycle Oil : EL50: 0.51 mg/l
Exposure time: 72 h
Species: Pseudokirchneriella subcapitata (green algae)
Growth inhibition Method: OECD Test Guideline 201

C12-C14 Isoalkanes EL50: > 1,000 mg/l
Exposure time: 72 h
Species: Pseudokirchneriella subcapitata (green algae)
Growth inhibition Method: OECD Test Guideline 201
Information given is based on data obtained from similar substances.

Naphthalene EC50: 2.96 mg/l
Exposure time: 48 h
Species: Selenastrum capricornutum (algae)

M-Factor

Distillates (petroleum), light catalytic cracked : M-Factor (Acute Aquat. Tox.) 1
M-Factor (Chron. Aquat. Tox.) 1

Toxicity to fish (Chronic toxicity)

C12-C14 Isoalkanes : No data available:

Biodegradability

Light Cycle Oil : aerobic
56.32 %
Testing period: 28 d

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Method: OECD Test Guideline 301F
Expected to be inherently biodegradable.

C12-C14 Isoalkanes : aerobic
Result: Readily biodegradable.
89.8 %
Testing period: 28 d
Method: OECD Test Guideline 301F
Information given is based on data obtained from similar substances.

Bioaccumulation

Light Cycle Oil : The product may be accumulated in organisms.

C12-C14 Isoalkanes : The product may be accumulated in organisms.

Mobility

Light Cycle Oil : No data available

C12-C14 Isoalkanes : immobile

Results of PBT assessment

Light Cycle Oil : Non-classified PBT substance, Non-classified vPvB substance

C12-C14 Isoalkanes : Non-classified PBT substance, Non-classified vPvB substance

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

Ecotoxicology Assessment**Short-term (acute) aquatic hazard**

Light Cycle Oil : Very toxic to aquatic life.

C12-C14 Isoalkanes : This material is not expected to be harmful to aquatic organisms.

Naphthalene : Very toxic to aquatic life.

Long-term (chronic) aquatic hazard

Light Cycle Oil : Very toxic to aquatic life with long lasting effects.

C12-C14 Isoalkanes : This material is not expected to be harmful to aquatic organisms.

Naphthalene : Very toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

The information in this SDS pertains only to the product as shipped.

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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, 3, III

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)

UN1202, DIESEL FUEL, 3, III, (40 °C c.c.), MARINE POLLUTANT, (LIGHT CYCLE OIL)

IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)

UN1202, DIESEL FUEL, 3, III

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

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

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

30, UN1202, DIESEL FUEL, 3, III, ENVIRONMENTALLY HAZARDOUS, (LIGHT CYCLE OIL)

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

UN1202, DIESEL FUEL, 3, III, ENVIRONMENTALLY HAZARDOUS, (LIGHT CYCLE OIL)

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Maritime transport in bulk according to IMO instruments**SECTION 15: Regulatory information****National legislation**

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)
Carcinogenicity
Specific target organ toxicity (single or repeated exposure)
Aspiration hazard
Skin corrosion or irritation

CERCLA Reportable Quantity : 2857 lbs
Naphthalene

SARA 302 Reportable Quantity : Calculated RQ exceeds reasonably attainable upper limit.
Pyrene

SARA 302 Threshold Planning Quantity : This material does not contain any components with a section 302 EHS TPQ.
SARA 304 Reportable Quantity : Calculated RQ exceeds reasonably attainable upper limit.
Pyrene 129-00-0 5000 lbs

SARA 313 Components : The following components are subject to reporting levels established by SARA Title III, Section 313:
: Naphthalene - 91-20-3

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).

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 112 (40 CFR 61):
: Naphthalene - 91-20-3

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 SOCM Intermediate or Final VOC's (40 CFR 60.489).

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US State Regulations

Pennsylvania Right To Know

: Light Cycle Oil - 64741-59-9
 C12-C14 Isoalkanes - 68551-19-9
 Naphthalene - 91-20-3
 Polynuclear Aromatics - 130498-29-2
 Xylenes - 1330-20-7
 p-xylene - 106-42-3
 m-xylene - 108-38-3
 Toluene - 108-88-3
 o-xylene - 95-47-6
 Phenanthrene - 85-01-8
 Ethylbenzene - 100-41-4

California Prop. 65
Components

: WARNING: This product can expose you to chemicals including [listed below], which is [are] known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov/food.

Naphthalene	91-20-3
Polynuclear Aromatics	130498-29-2
Phenanthrene	85-01-8
Ethylbenzene	100-41-4
Pyrene	129-00-0
Fluorene	86-73-7
Benzene	71-43-2

WARNING: This product can expose you to chemicals including [listed below], which is [are] known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Toluene	108-88-3
Benzene	71-43-2

Notification status

Europe REACH	: This product is in full compliance according to REACH regulation 1907/2006/EC.
United States of America (USA) TSCA	: On or in compliance with the active portion of the TSCA inventory
Switzerland CH INV	: On the inventory, or in compliance with the inventory
Canada DSL	: All components of this product are on the Canadian DSL
Australia AIIC	: Not in compliance with the inventory
New Zealand NZIoC	: Not in compliance with the inventory
Japan ENCS	: On the inventory, or in compliance with the inventory
Korea KECI	: A substance(s) in this product was not registered,

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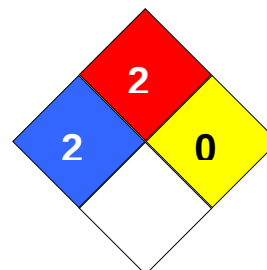
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notified to be registered, or exempted from registration
by CPChem according to K-REACH regulations.

Philippines PICCS : Not in compliance with the inventory
Taiwan TCSI : On the inventory, or in compliance with the inventory
China IECSC : On the inventory, or in compliance with the inventory

SECTION 16: Other information

NFPA Classification : Health Hazard: 2
Fire Hazard: 2
Reactivity Hazard: 0



Revision Date : 2025-10-03
Date of last issue : 2022-12-08

Further information

Legacy SDS Number : 664950

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%
AIIC	Australian Inventory of Industrial Chemicals	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

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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