


**TrusTec™ Diesel Reference Fuel U-34**

Version 2.8

Revision Date 2022-12-08

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

Product Name : TrusTec™ Diesel Reference Fuel U-34  
 Material : 1108915, 1024281, 1024280, 1032195, 1024277, 1024279,  
 1024278

Use : Reference Fuel

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

Local : See Company Address

**Emergency telephone:**
**Health:**

866.442.9628 (North America)

1.832.813.4984 (International)

**Transport:**

CHEMTREC 800.424.9300 or 703.527.3887(int'l)

Asia: CHEMWATCH (+612 9186 1132) China: 0532 8388 9090

Mexico CHEMTREC 01-800-681-9531 (24 hours)

South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600

Argentina: +(54)-1159839431

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

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

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

Bulgaria: +359 2 9154 233

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

Cyprus: 1401

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

Denmark: Danish Poison Center (Giftlinjen): +45 8212 1212

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

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

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

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

Greece: (0030) 2107793777 (24 hours/day, 7 days/week)

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

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

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

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

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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

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 labelling according to JIS Z 7252-2019 and JIS Z 7253-2019 (GHS 2015)****Classification**

: Flammable liquids, Category 3  
 Skin corrosion/irritation, Category 2  
 Carcinogenicity, Category 1B  
 Specific target organ toxicity - repeated exposure, Category 2,  
 Blood, Liver, thymus gland  
 Aspiration hazard, Category 1  
 Short-term (acute) aquatic hazard, Category 1  
 Long-term (chronic) aquatic 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.  
 H350: May cause cancer.  
 H373: May cause damage to organs (Blood, Liver, thymus gland) through prolonged or repeated exposure.  
 H410: Very toxic to aquatic life with long lasting effects.

Precautionary Statements

: **Prevention:**  
 P201: Obtain special instructions before use.

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P202: Do not handle until all safety precautions have been read and understood.  
 P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P233: Keep container tightly closed.  
 P240: Ground and bond container and receiving equipment.  
 P241: Use explosion-proof electrical/ ventilating/ lighting/ equipment.  
 P242: Use non-sparking tools.  
 P243: Take action to prevent static discharges.  
 P260: Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.  
 P264: Wash skin thoroughly after handling.  
 P273: Avoid release to the environment.  
 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.

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 U

Molecular formula : Mixture

Chemical name	CAS-No.	Concentration	ENCS/ISHL number
Light Cycle Oil	64741-59-9	60 % - 70%	(9)-1700
C12-C14 Isoalkanes	68551-19-9	30 % - 40%	(2)-10

**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

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- 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.

**SECTION 5: Firefighting measures**

- Flash point : 46.33°C (115.39°F)  
Method: Tag closed cup
- Autoignition temperature : No data available
- Suitable extinguishing media : Alcohol-resistant foam. Carbon dioxide (CO2). 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 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

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- 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 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.
- 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

**JP**

Components	Basis	Value	Control parameters	Note
Naphthalene	JP OEL ISHL	ACL	10 ppm,	
Xylenes	JP OEL JSOH	OEL-M	50 ppm, 217 mg/m3	
	JP OEL ISHL	ACL	50 ppm,	
	JP OEL JSOH	OEL-M	50 ppm, 217 mg/m3	2,
p-xylene	JP OEL JSOH	OEL-M	50 ppm, 217 mg/m3	3,
	JP OEL ISHL	ACL	50 ppm,	
m-xylene	JP OEL JSOH	OEL-M	50 ppm, 217 mg/m3	3,
	JP OEL ISHL	ACL	50 ppm,	

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Toluene	JP OEL ISHL	ACL	20 ppm,	
	JP OEL JSOH	OEL-M	50 ppm, 188 mg/m3	1, S,
o-xylene	JP OEL JSOH	OEL-M	50 ppm, 217 mg/m3	3,
	JP OEL ISHL	ACL	50 ppm,	
Ethylbenzene	JP OEL JSOH	OEL-M	50 ppm, 217 mg/m3	2, 2B,
	JP OEL ISHL	ACL	20 ppm,	
Benzene	JP OEL ISHL	ACL	1 ppm,	
	JP OEL JSOH	REF-Carc	1 ppm,	S, 1,
	JP OEL JSOH	REF-Carc	0.1 ppm,	S, 1,

- 1 Group 1: carcinogenic to humans  
 2 Group 2: Substances presumed to cause reproductive toxicity in humans  
 2B Group 2B: possibly carcinogenic to humans  
 3 Group 3: Substances suspected to cause reproductive toxicity in humans  
 S Skin absorption

**Biological exposure indices****JP**

Substance name	CAS-No.	Control parameters	Sampling time	Update
Xylenes	1330-20-7	total (o-, m-, p-)methylhippuric acid: 800 mg/l (Urine)	End of shift at end of workweek	2018-09-20
p-xylene	106-42-3	total (o-, m-, p-)methylhippuric acid: 800 mg/l (Urine)	End of shift at end of workweek	2018-09-20
m-xylene	108-38-3	total (o-, m-, p-)methylhippuric acid: 800 mg/l (Urine)	End of shift at end of workweek	2018-09-20
Toluene	108-88-3	Toluene: 0.6 mg/l (Blood)	Within 2 h prior to end of shift at end of work week	2011-05-18
		Toluene: 0.06 mg/l (Urine)	Within 2 h prior to end of shift at end of work week	2011-05-18
o-xylene	95-47-6	total (o-, m-, p-)methylhippuric acid: 800 mg/l (Urine)	End of shift at end of workweek	2018-09-20

**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 : 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

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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 : 46.33°C (115.39°F)  
Method: Tag closed cup
- 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 : No data available
- Boiling point/boiling range : 173-313°C (343-595°F)
- Vapor pressure : No data available
- Relative density : 0.876  
at 15.6 °C (60.1 °F)
- Density : 0.8755 g/cm<sup>3</sup>
- Bulk density : 7.31 L/G

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Water solubility	: negligible
Partition coefficient: n-octanol/water	: No data available
Viscosity, kinematic	: 1.813 cSt at 40°C (104°F)
Relative vapor density	: 3 (Air = 1.0)
Evaporation rate	: < 1
Percent volatile	: > 99 %

**SECTION 10: Stability and reactivity**

<b>Reactivity</b>	: Stable under recommended storage conditions.
<b>Chemical stability</b>	: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
<b>Possibility of hazardous reactions</b>	
<b>Hazardous reactions</b>	: Hazardous reactions: Hazardous polymerization does not occur.  Hazardous reactions: Vapors may form explosive mixture with air.
<b>Conditions to avoid</b>	: Heat, flames and sparks.
<b>Materials to avoid</b>	: May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.
<b>Thermal decomposition</b>	: No data available
<b>Hazardous decomposition products</b>	: Carbon oxides
<b>Other data</b>	: No decomposition if stored and applied as directed.

**SECTION 11: Toxicological information**

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<b>Acute oral toxicity</b>	: 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**

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.

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Species: Rat, male and female  
 Sex: male and female  
 Application Route: Inhalation  
 Dose: 2600, 5200, 10400 mg/m<sup>3</sup>  
 Exposure time: 90 d  
 Number of exposures: 6 h/d; 5d/wk  
 NOEL: > 10400 mg/m<sup>3</sup>  
 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

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

**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.

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**Carcinogenicity** : Remarks: May cause cancer.

**Developmental Toxicity**

Light Cycle Oil : Species: Rat

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C12-C14 Isoalkanes	<p>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</p> <p>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.</p> <p>Species: Rat  Application Route: Inhalation  Dose: 300, 900 ppm  Exposure time: 6h  Test period: GD 6-15  NOAEL Teratogenicity: &gt;= 900 ppm  NOAEL Maternal: &gt;= 900 ppm  Information given is based on data obtained from similar substances.</p>
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<b>Aspiration toxicity</b>	: May be fatal if swallowed and enters airways.
<b>CMR effects</b>	
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.
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<b>Further information</b>	: 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
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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.

**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.

**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.

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

C12-C14 Isoalkanes : aerobic  
 Result: Readily biodegradable.

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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.

**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.

**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.

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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, (46.33 °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)

**Maritime transport in bulk according to IMO instruments**

**SECTION 15: Regulatory information**

**National legislation**

**Poisonous and Deleterious Substances Control Law**

: Not applicable

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**Industrial Safety and Health Law**

Substances Subject to be : naphthalene( 408 )  
 Notified Names Article 57-2  
 (Enforcement Order Table 9) xylenes( 136 )

Enforcement Order of the : Inflammable Substance  
 Industrial Safety and Health  
 Law - Attached table 1  
 (Dangerous Substances)  
 Enforcement Order of the : Inflammable Substance  
 Industrial Safety and Health  
 Law - Attached table 1  
 (Dangerous Substances)

Harmful Substances Required : Not applicable  
 Permission for Manufacture

Hazardous Substances : naphthalene ( 408 )  
 Subject to Labeling  
 Requirements Article 57  
 (Enforcement Order Article  
 18)

Ordinance on Prevention of : Not applicable  
 Organic Solvent Poisoning

Ordinance on Prevention of : Not applicable  
 Lead Poisoning

Harmful Substances : Not applicable

Prohibited from Manufacture  
 Ordinance on Prevention of : naphthalene( 23.2 )  
 Hazards Due to Specified  
 Chemical Substances Group  
 2 Substance

Ordinance on Prevention of : Not applicable  
 Tetraalkyl Lead Poisoning

Mutagens, Existing Chemicals : naphthalene, naphthalene (Molten), naphthalene (Refined or  
 crude), naphthalene (Refined), naphthalene (Crude)

: Not applicable

Substances Prevented From : Not applicable  
 Impairment of Health Listed

**Chemical Substance Control Law**

Priority Assessment Chemical : naphthalene( 76 )  
 Substance toluene( 46 )  
 ethylbenzene( 50 )  
 Benzene( 45 )  
 xylenes( 125 )

**Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof**

Class I Designated Chemical : naphthalene( 302 )  
 Substances

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**Other regulations**

Fire Service Law	:	Flammable liquids Type 2 petroleums Hazardous rank III
High Pressure Gas Safety Act	:	Not applicable
Explosive Control Law	:	Not applicable
Vessel Safety Law	:	Flammable liquids (Article 2 and 3 of rules on shipping and storage of dangerous goods and its Attached Table 1)
Aviation Law	:	Flammable liquid (Article 194 of The Enforcement Rules of Aviation Law and its Attached Table 1)

**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 AIC	:	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, notified to be registered, or exempted from registration by CPChem according to K-REACH regulations. Importation or manufacture of this product is still permitted provided the Korean Importer of Record has themselves notified the substance or the exported amount does not exceed the minimum threshold quantity of the non-registered substance(s).
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****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



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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
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