Diesel No. 2 Test Fuel

Version 1.5 Revision Date 2011-10-17

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product information

Trade name : Diesel No. 2 Test Fuel
Material : 1108397, 1097307, 1096433, 1083233, 1096612, 1084817, 1097324, 1097322, 1097310, 1089768, 1079939, 1097309, 1090864, 1077073, 1077061, 1090863, 1069145, 1100027, 1099634, 1090866, 1099603, 1090314, 1097785, 1087561, 1092489, 1076410, 1102501, 1097387, 1090432, 1090433, 1100452, 1097386, 1078955, 1100842, 1077075, 1097308, 1100531, 1069147, 1090862, 1078060, 1077077, 1068920, 1078988, 1017963, 1017962, 1036152, 1024299, 1024300, 1017964, 1024301, 1017977, 1024303, 1017981, 1017980, 1017965, 1017978, 1017967, 1017966, 1017979, 1024297, 1024293, 1029744, 1024292, 1017982, 1024294, 1024296, 1024302, 1024304, 1024309, 1024308, 1024307, 1024306, 1024295, 1024305, 1024298, 1029490, 1104964, 1104939, 1104952, 1104938, 1104941, 1104963, 1104956, 1104955, 1104953

Company : Specialty Chemicals
10001 Six Pines Drive
The Woodlands, TX 77380

Emergency telephone:

Health:
866.442.9628 (North America)
1.832.813.4984 (International)
Transport:
North America: CHEMTREC 800.424.9300 or 703.527.3887
Asia: +800 CHEMCALL (+800 2436 2255) China: 0532.8388.9090
EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
Chemcare Asia: Tel: +65 6848 9048 - Mob: +65 8382 9188 - Fax: +65 6848
South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600

Responsible Department : Product Safety and Toxicology Group
E-mail address : MSDS@CPChem.com
Website : www.CPChem.com

2. HAZARDS IDENTIFICATION

Emergency Overview

Danger

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

GHS Classification

: Flammable liquids, Category 3
Skin irritation, Category 2

Eye irritation, Category 2B
Carcinogenicity, Category 2
Specific target organ systemic toxicity - repeated exposure, Category 1, Eyes, Blood
Aspiration hazard, Category 1
Acute aquatic toxicity, Category 2
Chronic aquatic toxicity, Category 2

GHS-Labeling

Symbol(s) :

Signal Word : Danger

Hazard Statements :
H226: Flammable liquid and vapor.
H304: May be fatal if swallowed and enters airways.
H315 + H320: Causes skin and eye irritation.
H351: Suspected of causing cancer.
H372: Causes damage to organs (Eyes, Blood) through prolonged or repeated exposure.
H411: Toxic to aquatic life with long lasting effects.

Precautionary Statements :
Prevention:
P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P243: Take precautionary measures against static discharge.
P260: Do not breathe dust/fume/gas/mist/vapor/spray.
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 or doctor/ physician.
P331: Do NOT induce vomiting.
P370 + P378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
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.

Carcinogenicity:

IARC	Group 2B: Possibly carcinogenic to humans	
	Naphthalene	91-20-3
NTP	Reasonably anticipated to be a human carcinogen	
	Naphthalene	91-20-3
ACGIH	Confirmed animal carcinogen with unknown relevance to humans: The agent is carcinogenic in experimental animals at a relatively high dose, by route(s) of administration, at site(s), of histologic type(s), or by mechanism(s) that may not be relevant to worker exposure. Available epidemiologic studies do not confirm an increased risk of cancer in exposed humans. Available evidence	

does not suggest that the agent is likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure.
Diesel fuel 68476-34-6

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Diesel CEC (RF-73-T-90)
Diesel Reference Fuels, Diesel Cert Fuel, Oil Classification Diesel
Diesel 0.05 LS Emiss Cert Test Fuel- Cummins
Diesel 2007 Emission Certification Fuel
Diesel Euro-II Cert Fuel
Diesel Euro-IV Cert Fuel
Locomotive Diesel Certification Fuel
Diesel Euro-III Cert Fuel
Diesel 0.05 LS Emiss Cert Test Fuel- ITE
PC-10 Diesel Test Fuel
Diesel Special Test Fuel
Diesel CEC (RF-03-A-84)
Ultra High Cetane Check Fuel (ASTM) Diesel
Diesel 2004 Tier 2 Fuel
0.05% Sulfur Diesel Fuel - JASO
No Sulfur (less than 3 PPM) Diesel Test Fuel

Molecular formula : UVCB

Component	CAS-No.	Weight %
Diesel fuel	68476-34-6	100
Naphthalene	91-20-3	1 - 5

4. FIRST AID MEASURES

General advice : Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Do not leave the victim unattended.

If inhaled : Keep respiratory tract clear. 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 : Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. Take victim immediately to hospital.

5. FIRE-FIGHTING MEASURES

Flash point	:	> 47 °C (> 117 °F) minimum
Autoignition temperature	:	No data available
Suitable extinguishing media	:	Dry chemical. Carbon dioxide (CO2). Alcohol-resistant foam.
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 fire fighting if necessary.
Further information	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.
Fire and explosion protection	:	Do not spray on an open flame or any other incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Keep away from open flames, hot surfaces and sources of ignition.
Hazardous decomposition products	:	Hydrocarbons. Carbon oxides.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	:	Use personal protective equipment. 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).

7. HANDLING AND STORAGE

Handling

Advice on safe handling	:	Avoid formation of aerosol. Do not breathe vapors/dust. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Provide sufficient air exchange and/or exhaust in work rooms. Only add small quantities of acids and bases to water, never the opposite. Always use stirring. Dispose of rinse water in accordance with local and national regulations.
Advice on protection against fire and explosion	:	Do not spray on an open flame or any other incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Keep away from open flames, hot surfaces and sources of ignition.

Storage

Requirements for storage areas and containers	:	No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

US

Ingredients	Basis	Value	Control parameters	Note
Diesel fuel	ACGIH	TWA	100 mg/m3	A3, Skin, varies, Inhalable fraction and vapor
Naphthalene	ACGIH	TWA	10 ppm,	A4, Skin,
	ACGIH	STEL	15 ppm,	A4, Skin,
	OSHA Z-1	TWA	10 ppm, 50 mg/m3	(b),
	OSHA Z-1-A	TWA	10 ppm, 50 mg/m3	
	OSHA Z-1-A	STEL	15 ppm, 75 mg/m3	

(b) The value in mg/m3 is approximate.
A3 Confirmed animal carcinogen with unknown relevance to humans: The agent is carcinogenic in experimental animals at a relatively high dose, by route(s) of administration, at site(s), of histologic type(s), or by mechanism(s) that may not be relevant to worker exposure. Available epidemiologic studies do not confirm an increased risk of cancer in exposed humans. Available evidence does not suggest that the agent is likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure.
A4 Not classifiable as a human carcinogen: Agents which cause concern that they could be carcinogenic for humans but which cannot be assessed conclusively because of a lack of data. In vitro or animal studies do not provide indications of carcinogenicity which are sufficient to classify the agent into one of the other categories.
Skin Danger of cutaneous absorption
varies varies

Personal protective equipment

Respiratory protection	:	In the case of vapor formation use a respirator with an approved filter.
Hand protection	:	The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Eye protection	:	Safety glasses. Ensure that eyewash stations and safety showers are close to the workstation location.
Hygiene measures	:	Wash hands before breaks and immediately after handling the product. Remove contaminated clothing and protective equipment before entering eating areas.

Protective measures	:	Wear suitable protective equipment. When using do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance

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

Safety data

Flash point	:	> 47 °C (> 117 °F) minimum
Lower explosion limit	:	No data available
Upper explosion limit	:	No data available
Oxidizing properties	:	no
Autoignition temperature	:	No data available
Molecular formula	:	UVCB
Molecular Weight	:	No data available
pH	:	Not applicable
Pour point	:	No data available
Boiling point/boiling range	:	191 - 343 °C (376 - 649 °F)
Vapor pressure	:	No data available
Relative density	:	0.87, 16 °C(61 °F)
Density	:	0.75 - 90 g/cm3
Water solubility	:	Negligible
Partition coefficient: n-octanol/water	:	No data available
Viscosity, kinematic	:	2.55 cSt at 40 °C (104 °F)
Relative vapor density	:	No data available
Evaporation rate	:	No data available
Percent volatile	:	> 99 %

10. STABILITY AND REACTIVITY

Possibility of hazardous reactions

Conditions to avoid	:	No data available.
Materials to avoid	:	May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.
Other data	:	This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

11. TOXICOLOGICAL INFORMATION

Diesel No. 2 Test Fuel
Acute oral toxicity : : > 5,000 mg/kg
Method: Estimated based on individual component values.

Acute inhalation toxicity

Naphthalene : LC50: >0.38 mg/m3Exposure time: 4 HR

Diesel No. 2 Test Fuel
Acute dermal toxicity : : > 2,000 mg/kg
Method: Estimated based on individual component values.

Diesel No. 2 Test Fuel
Skin irritation : Irritating to skin.

Diesel No. 2 Test Fuel
Eye irritation : Mild eye irritation

Sensitization

Naphthalene : Classification: Did not cause sensitization on laboratory animals.

Repeated dose toxicity

Diesel fuel : Species: rat
Application Route: Dermal
Dose: 0, 435, 1740, 4350 mg/kg
Exposure time: 28 day
Number of exposures: daily, 5 days/week
Lowest observable effect level: 435 mg/kg

Carcinogenicity

Diesel fuel : Species: mouse
Dose: 0, 50 ul
Exposure time: lifetime

Number of exposures: 2 times/wk
Remarks: Moderate dermal carcinogen

Naphthalene

Species: mouse
Sex: male
Dose: 10, 30 ppm
Exposure time: 105 weeks
Number of exposures: 6 hours/day, 5 days/week
Test substance: yes
Print Date: No information available.
Remarks: No evidence of carcinogenicity

Species: mouse
Sex: female
Dose: 10, 30 ppm
Exposure time: 105 weeks
Number of exposures: 6 hours/day, 5 days/week
Test substance: yes
Print Date: No information available.
Remarks: increased incidence of alveolar/bronchiolar adenomas

Species: rat
Sex: male and female
Dose: 10, 30, 60 ppm
Exposure time: 105 weeks
Number of exposures: 6 hours/day, 5 days/week
Test substance: yes
Print Date: No information available.
Remarks: nose respiratory epithelial adenoma, increased incidence of olfactory neuroblastomas

Teratogenicity

Diesel fuel : Species: rat
Application Route: Inhalation
Dose: 0, 100, 400 ppm
Number of exposures: 6 h/d
Test period: GD 6-15
NOAEL Teratogenicity: 401.5 ppm
NOAEL Maternal: 401.5 ppm

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

Diesel No. 2 Test Fuel
Aspiration toxicity : May be fatal if swallowed and enters airways.

12. ECOLOGICAL INFORMATION

Toxicity to fish

Naphthalene : LC50: 3.2 mg/l
Exposure time: 96 HR

Species: Pimephales promelas (fathead minnow)

Toxicity to daphnia and other aquatic invertebrates.

Diesel fuel	:	EC50: 12.99 mg/l Exposure time: 48 HR Species: Daphnia magna (Water flea) Method: OECD Test Guideline 202
Naphthalene		LC50: 2.16 mg/l Exposure time: 48 HR Species: Daphnia magna (Water flea)

Toxicity to algae

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

Elimination information (persistence and degradability)

Biodegradability	:	This material is not expected to be readily biodegradable.

13. DISPOSAL CONSIDERATIONS

The information in this MSDS 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	:	Dispose of wastes in an approved waste disposal facility.

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 MSDS 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, MARINE POLLUTANT, (Naphthalene), (> 47 °C)

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)

RID (Regulations concerning the International Transport of Dangerous Goods (Europe))
UN1202, DIESEL FUEL, 3, III

ADN (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
UN1202, DIESEL FUEL, 3, III

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

15. REGULATORY INFORMATION

National legislation

SARA 311/312 Hazards	:	Acute Health Hazard Chronic Health Hazard Fire Hazard
CERCLA Reportable Quantity	:	Naphthalene
SARA 302 Threshold Planning Quantity	:	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Ingredients	:	
	:	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).

US State Regulations

Pennsylvania Right To Know

	:	Diesel fuel	68476-34-6
	:	Naphthalene	91-20-3

New Jersey Right To Know

	:	Diesel fuel	68476-34-6
	:	Naphthalene	91-20-3

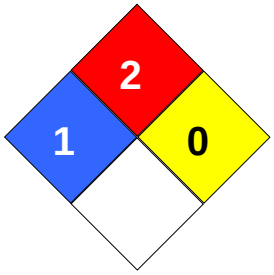
California Prop. 65 Ingredients : WARNING! This product contains a chemical known in the State of California to cause cancer.

Notification status

Europe REACH	:	A substance or substances in this product is not registered or notified to be registered. Importation or manufacture of this product is still permitted provided that it does not exceed the REACH minimum threshold quantity of the non-regulated substances.
United States of America US.TSCA	:	On the inventory, or in compliance with the inventory
Canada DSL	:	On the inventory, or in compliance with the inventory
Australia AICS	:	On the inventory, or in compliance with the inventory
New Zealand NZIoC	:	On the inventory, or in compliance with the inventory
Japan ENCS	:	On the inventory, or in compliance with the inventory
Korea KECI	:	On the inventory, or in compliance with the inventory
Philippines PICCS	:	On the inventory, or in compliance with the inventory
China IECSC	:	On the inventory, or in compliance with the inventory

16. OTHER INFORMATION

NFPA Classification : Health Hazard: 1
Fire Hazard: 2
Reactivity Hazard: 0



Further information

Legacy MSDS Number : CPC00523

Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

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

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Key or legend to abbreviations and acronyms used in the safety data sheet			
ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philipines 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 Compositon, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50	Lethal Concentration 50%		