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SECTION 1. IDENTIFICATION

Product name : SH TXLED NR DIESEL 2 (S-15 PPM)DYED

Product code : 002D3112

Manufacturer or supplier's details

Manufacturer/Supplier : Shell Trading (US) Company

P. O. BOX 4604

Houston, TX 77210-4604

USA

SDS Request : 877-276-7285

Customer Service

Emergency telephone number

Spill Information : NORTH AMERICA - 1-800-424-9300

INTERNATIONAL - +1-703-527-3887

Health Information : 1-877-504-9351

Recommended use of the chemical and restrictions on use

Recommended use : Fuel for use in diesel powered engines.

Restrictions on use : This product must not be used in applications other than those

listed in Section 1 without first seeking the advice of the sup-

plier.

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 3

Aspiration hazard : Category 1

Acute Toxicity (Inhalation) : Category 4

Skin irritation : Category 2

Carcinogenicity : Category 2

Specific target organ toxicity

- repeated exposure

: Category 2 (Blood, Thymus, Liver.)

Chronic aquatic toxicity : Category 2

GHS Label element

Hazard pictograms :









Signal word : Danger

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Hazard statements : PHYSICAL HAZARDS:

H226 Flammable liquid and vapour.

HEALTH HAZARDS:

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation. H332 Harmful if inhaled.

H351 Suspected of causing cancer.

H373 May cause damage to organs through prolonged or re-

peated exposure.

ENVIRONMENTAL HAZARDS:

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**

P210 Keep away from heat/sparks/open flames/hot surfaces. -

No smoking.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

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.

Disposal:

P501 Dispose of contents and container to appropriate waste site or reclaimer in accordance with local and national regula-

tions.

Other hazards which do not result in classification

May ignite on surfaces at temperatures above auto-ignition temperature.

Vapour in the headspace of tanks and containers may ignite and explode at temperatures exceeding auto-ignition temperature, where vapour concentrations are within the flammability range. This material is a static accumulator.

Even with proper grounding and bonding, this material can still accumulate an electrostatic charge.

If sufficient charge is allowed to accumulate, electrostatic discharge and ignition of flammable airvapour mixtures can occur.

This product is intended for use in closed systems only.

The classification of this material is based on OSHA HCS 2012 criteria.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : May contain catalytically cracked oils in which polycyclic aro-

matic compounds, mainly 3-ring but some 4- to 6-ring species

are present.

May also contain several additives at <0.1% v/v each.

Hazardous components

Chemical Name	Synonyms	CAS-No.	Concentration (%)
Fuels, diesel	Fuels, diesel	68334-30-5	99 - 100

Dyes and markers can be used to indicate tax status and prevent fraud.

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Further information

Contains:

Chemical Name	Identification number	Concentration [%]
Cumene	98-82-8, 202-704-5	0 - 0.5
Naphthalene	91-20-3, 202-049-5	0 - 0.5

SECTION 4. FIRST-AID MEASURES

If inhaled Remove to fresh air. If rapid recovery does not occur, trans-

port to nearest medical facility for additional treatment.

: Remove contaminated clothing. Immediately flush skin with In case of skin contact

> large amounts of water for at least 15 minutes, and follow by washing with soap and water if available. If redness, swelling, pain and/or blisters occur, transport to the nearest medical

facility for additional treatment.

When using high pressure equipment, injection of product under the skin can occur. If high pressure injuries occur, the casualty should be sent immediately to a hospital. Do not wait

for symptoms to develop.

: Flush eye with copious quantities of water. In case of eye contact

If persistent irritation occurs, obtain medical attention.

If swallowed : If swallowed, do not induce vomiting: transport to nearest

medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 101° F (38.3°C), shortness of breath, chest congestion or continued coughing or wheezing.

Give nothing by mouth.

Most important symptoms and effects, both acute and

delayed

If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever.

The onset of respiratory symptoms may be delayed for sever-

al hours after exposure.

Skin irritation signs and symptoms may include a burning sen-

sation, redness, or swelling.

Protection of first-aiders : When administering first aid, ensure that you are wearing the

appropriate personal protective equipment according to the

incident, injury and surroundings.

Immediate medical attention,

special treatment

: Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Foam, water spray or fog. Dry chemical powder, carbon dio-

xide, sand or earth may be used for small fires only.

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Unsuitable extinguishing

media

: Do not use direct water jets on the burning product as they could cause a steam explosion and spread of the fire. Simultaneous use of foam and water on the same surface is

to be avoided as water destroys the foam.

Specific hazards during fire-

fighting

Hazardous combustion products may include:

A complex mixture of airborne solid and liquid particulates and

gases (smoke). Oxides of sulphur.

Unidentified organic and inorganic compounds.

Carbon monoxide may be evolved if incomplete combustion

Will float and can be reignited on surface water.

Flammable vapours may be present even at temperatures

below the flash point.

The vapour is heavier than air, spreads along the ground and

distant ignition is possible.

Specific extinguishing me-

thods

: Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment.

Further information : Clear fire area of all non-emergency personnel.

> Keep adjacent containers cool by spraying with water. If possible remove containers from the danger zone.

If the fire cannot be extinguished the only course of action is

to evacuate immediately.

Contain residual material at affected sites to prevent material

from entering drains (sewers), ditches, and waterways.

Special protective equipment

for firefighters

Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained

Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to

relevant Standards (e.g. Europe: EN469).

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- : Do not breathe fumes, vapor. tive equipment and emergency procedures

Do not operate electrical equipment.

Shut off leaks, if possible without personal risks. Remove all possible sources of ignition in the surrounding area and evacuate all personnel. Attempt to disperse the gas or to direct its flow to a safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Monitor area with combustible gas meter.

Environmental precautions : Take measures to minimise the effects on groundwater.

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Contain residual material at affected sites to prevent material from entering drains (sewers), ditches, and waterways. Prevent from spreading or entering into drains, ditches or rivers by using sand, earth, or other appropriate barriers.

Methods and materials for containment and cleaning up

Take precautionary measures against static discharges. For small liquid spills (< 1 drum), transfer by mechanical means to a labeled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely Remove contaminated soil and dispose of safely.

For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely Prevent from spreading or entering into drains, ditches or rivers by using sand, earth, or other appropriate barriers. For solids, shovel into a suitable clearly marked container for disposal or reclamation in accordance with local regulations.

Observe all relevant local and international regulations. Evacuate the area of all non-essential personnel. Ventilate contaminated area thoroughly.

Additional advice

: For guidance on selection of personal protective equipment see Chapter 8 of this Safety Data Sheet.

Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

For guidance on disposal of spilled material see Chapter 13 of this Safety Data Sheet.

Local authorities should be advised if significant spillages cannot be contained.

Maritime spillages should be dealt with using a Shipboard Oil Pollution Emergency Plan (SOPEP), as required by MARPOL Annex 1 Regulation 26.

U.S. regulations may require reporting releases of this material to the environment which exceed the reportable quantity (refer to Chapter 15) to the National Response Center at (800) 424-8802.

Under Section 311 of the Clean Water Act (CWA) this material is considered an oil. As such, spills into surface waters must be reported to the National Response Center at (800) 424-8802.

This material is covered by EPA's Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Petroleum Exclusion. Therefore, releases to the environment may not be reportable under CERCLA.

SECTION 7. HANDLING AND STORAGE

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Technical measures

: Avoid breathing of or direct contact with material. Only use in well ventilated areas. Wash thoroughly after handling. For guidance on selection of personal protective equipment see Chapter 8 of this Safety Data Sheet.

Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material

Air-dry contaminated clothing in a well-ventilated area before

laundering.
Prevent spillages.

Use local exhaust ventilation if there is risk of inhalation of

vapours, mists or aerosols. Never siphon by mouth.

Contaminated leather articles including shoes cannot be decontaminated and should be destroyed to prevent reuse.

Precautions for safe handling

: Ensure that all local regulations regarding handling and storage facilities are followed.

Avoid inhaling vapour and/or mists.

Avoid prolonged or repeated contact with skin.

When using do not eat or drink.

Extinguish any naked flames. Do not smoke. Remove ignition

sources. Avoid sparks. Earth all equipment.

Properly dispose of any contaminated rags or cleaning mate-

rials in order to prevent fires.

Use local exhaust ventilation if there is risk of inhalation of

vapours, mists or aerosols.

Avoidance of contact

: Strong oxidising agents.

Product Transfer

: Avoid splash filling Wait 2 minutes after tank filling (for tanks such as those on road tanker vehicles) before opening hatches or manholes. Wait 30 minutes after tank filling (for large storage tanks) before opening hatches or manholes. Keep containers closed when not in use. Contamination resulting from product transfer may give rise to light hydrocarbon vapour in the headspace of tanks that have previously contained gasoline. This vapour may explode if there is a source of ignition. Partly filled containers present a greater hazard than those that are full, therefore handling, transfer and sampling activities need special care. Even with proper grounding and bonding, this material can still accumulate an electrostatic charge. If sufficient charge is allowed to accumulate, electrostatic discharge and ignition of flammable airvapour mixtures can occur. Be aware of handling operations that may give rise to additional hazards that result from the accumulation of static charges. These include but are not limited to pumping (especially turbulent flow), mixing, filtering, splash filling, cleaning and filling of tanks and containers, sampling, switch loading, gauging, vacuum truck operations, and mechanical movements. These activities may lead to static discharge e.g. spark formation. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (≤ 1 m/s until fill pipe submerged to twice its diame-

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ter, then \leq 7 m/s). Avoid splash filling. Do NOT use compressed air for filling, discharging, or handling operations.

Storage

Other data

: Drum and small container storage:

Drums should be stacked to a maximum of 3 high. Use properly labeled and closable containers.

Tank storage:

Tanks must be specifically designed for use with this product. Bulk storage tanks should be diked (bunded).

Locate tanks away from heat and other sources of ignition. Must be stored in a diked (bunded) well- ventilated area, away from sunlight, ignition sources and other sources of heat. Vapours from tanks should not be released to atmosphere. Breathing losses during storage should be controlled by a suitable vapour treatment system.

The vapour is heavier than air. Beware of accumulation in pits and confined spaces.

Keep container tightly closed and in a cool, well-ventilated place.

Keep in a cool place.

Electrostatic charges will be generated during pumping. Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment to reduce the risk.

The vapours in the head space of the storage vessel may lie in the flammable/explosive range and hence may be flammable.

Refer to section 15 for any additional specific legislation covering the packaging and storage of this product.

Keep in a bunded area with a sealed (low permeability) floor, to provide containment against spillage.

Prevent ingress of water.

Specific use(s)

: See additional references that provide safe handling practices for liquids that are determined to be static accumulators: American Petroleum Institute 2003 (Protection Against Ignitions Arising out of Static, Lightning and Stray Currents) or National Fire Protection Agency 77 (Recommended Practices on Static Electricity).

CENELEC CLC/TR 50404 (Electrostatics – Code of practice for the avoidance of hazards due to static electricity). Ensure that all local regulations regarding handling and sto-

rage facilities are followed.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Fuels, diesel	68334-30-5	X ((inhalable fraction))		US. ACGIH Threshold

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				Limit Values
		TWA ((inhal-		US. ACGIH
		able frac-		Threshold
		tion))		Limit Values
		TWA (Inhal- able fraction and vapor)	100 mg/m3 (as total hydro- carbons)	ACGIH
Naphthalene	91-20-3	TWA	10 ppm 50 mg/m3	OSHA Z-1
		TWA	10 ppm	ACGIH
Cumene	98-82-8	TWA	50 ppm 245 mg/m3	OSHA Z-1
		TWA	50 ppm	ACGIH

Monitoring Methods

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.

Validated exposure measurement methods should be applied by a competent person and samples analysed by an accredited laboratory.

Examples of sources of recommended exposure measurement methods are given below or contact the supplier. Further national methods may be available.

National Institute of Occupational Safety and Health (NIOSH), USA: Manual of Analytical Methods http://www.cdc.gov/niosh/

Occupational Safety and Health Administration (OSHA), USA: Sampling and Analytical Methods http://www.osha.gov/

L'Institut National de Recherche et de Securité, (INRS), France http://www.inrs.fr/accueil Health and Safety Executive (HSE), UK: Methods for the Determination of Hazardous Substances http://www.hse.gov.uk/

Institut für Arbeitsschutz Deutschen Gesetzlichen Unfallversicherung (IFA) , Germany http://www.dguv.de/inhalt/index.jsp

Engineering measures

: The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include:

Use sealed systems as far as possible.

Firewater monitors and deluge systems are recommended. Adequate explosion-proof ventilation to control airborne concentrations below the exposure guidelines/limits.

Local exhaust ventilation is recommended.

Eye washes and showers for emergency use.

General Information:

Always observe good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

Define procedures for safe handling and maintenance of controls.

Educate and train workers in the hazards and control measures relevant to normal activities associated with this product. Ensure appropriate selection, testing and maintenance of

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equipment used to control exposure, e.g. personal protective equipment, local exhaust ventilation.

Drain down system prior to equipment break-in or maintenance

Retain drain downs in sealed storage pending disposal or subsequent recycle.

Do not ingest. If swallowed then seek immediate medical assistance

Personal protective equipment

Respiratory protection

: If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are unsuitable (e.g. airborne concentrations are high, risk of oxygen deficiency, confined space) use appropriate positive pressure breathing apparatus.

Where air-filtering respirators are suitable, select an appropriate combination of mask and filter.

Select a filter suitable for the combination of organic gases and vapours [Type A/Type P boiling point >65°C (149°F)].

Hand protection Remarks

Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection. When prolonged or frequent repeated contact occurs. Nitrile rubber. For incidental contact/splash protection Neoprene, PVC gloves may be suitable. For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same, but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a nonperfumed moisturizer is recommended.

Eye protection

: If material is handled such that it could be splashed into eyes, protective eyewear is recommended.

If a local risk assessment deems it so then chemical splash goggles may not be required and safety glasses may provide

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adequate eye protection.

Skin and body protection : Wear chemical resistant gloves/gauntlets and boots. Where

risk of splashing, also wear an apron.

Protective measures : Personal protective equipment (PPE) should meet recom-

mended national standards. Check with PPE suppliers.

Hygiene measures : Always observe good personal hygiene measures, such as

washing hands after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned.

Practice good housekeeping.

Define procedures for safe handling and maintenance of

controls.

Educate and train workers in the hazards and control measures relevant to normal activities associated with this product. Ensure appropriate selection, testing and maintenance of equipment used to control exposure, e.g. personal protective

equipment, local exhaust ventilation.

Drain down system prior to equipment break-in or mainten-

ance.

Retain drain downs in sealed storage pending disposal or

subsequent recycle.

Do not ingest. If swallowed then seek immediate medical

assistance.

If repeated and/or prolonged skin exposure to the substance is likely, then wear suitable gloves tested to EN374 and pro-

vide employee skin care programmes.

Environmental exposure controls

General advice : Local guidelines on emission limits for volatile substances

must be observed for the discharge of exhaust air containing

vapour.

Minimise release to the environment. An environmental assessment must be made to ensure compliance with local envi-

ronmental legislation.

Information on accidental release measures are to be found in

section 6.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : pale red-brown

Odour : Not applicable

Odour Threshold : Data not available

Melting / freezing point : Data not available

Initial boiling point and boiling

range

: 170 - 390 °C / 338 - 734 °FMethod: Unspecified

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Flash point : 55 - 75 °C / 131 - 167 °F

Method: Unspecified

Flammability (solid, gas) : Not applicable

Vapour pressure : $<= 0.4 \text{ kPa} (38.0 \,^{\circ}\text{C} / 100.4 \,^{\circ}\text{F})$

Method: Unspecified

<= 0.6 kPa (50.0 °C / 122.0 °F)

Method: Unspecified

Density : 820 - 860 kg/m3 (15.0 °C / 59.0 °F)

Method: Unspecified

Solubility(ies)

Water solubility : negligible

Partition coefficient: n-

octanol/water

: Not applicable

Auto-ignition temperature : >

225 °C / 437 °F

Viscosity

Viscosity, kinematic : 2 - 4.5 mm2/s (40 °C / 104 °F)

Method: Unspecified

Explosive properties : Classification Code: NOT CLASS: Not classified

Oxidizing properties : Not applicable

Conductivity: < 100 pS/m, The conductivity of this material

makes it a static accumulator., A liquid is typically considered nonconductive if its conductivity is below 100 pS/m and is considered semi-conductive if its conductivity is below 10 000 pS/m., Whether a liquid is nonconductive or semiconductive, the precautions are the same., A number of factors, for example liquid temperature, presence of contaminants, and antistatic additives can greatly influence the conductivity of a liq-

uid

SECTION 10. STABILITY AND REACTIVITY

Reactivity : The product does not pose any further reactivity hazards in

addition to those listed in the following sub-paragraph.

Chemical stability : Stable under normal use conditions.

Conditions to avoid : Avoid heat, sparks, open flames and other ignition sources.

In certain circumstances product can ignite due to static elec-

tricity.

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Incompatible materials : Strong oxidising agents.

Hazardous decomposition

products

: Hazardous decomposition products are not expected to form

during normal storage.

Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids and gases including carbon monoxide, carbon dioxide, sulphur oxides and unidentified organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degra-

dation.

SECTION 11. TOXICOLOGICAL INFORMATION

Basis for assessment : Information given is based on product data, a knowledge of

the components and the toxicology of similar products.
Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual com-

ponent(s).

Information on likely routes of exposure

Skin and eye contact are the primary routes of exposure although exposure may occur through inhalation or following accidental ingestion.

Acute toxicity

Product:

Acute oral toxicity : LD50 (rat): > 5,000 mg/kg

Remarks: Low toxicity:

Acute inhalation toxicity : LC 50 (rat): > 1 - <=5 mg/l

Exposure time: 4 h

Remarks: Harmful if inhaled.

Acute dermal toxicity : LD 50 (Rabbit): > 2,000 mg/kg

Remarks: Low toxicity:

Skin corrosion/irritation

Product:

Remarks: Irritating to skin.

Serious eye damage/eye irritation

Product:

Remarks: Expected to be slightly irritating.

Respiratory or skin sensitisation

Product:

Remarks: Not expected to be a sensitiser.

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Germ cell mutagenicity

Product:

: Remarks: Positive in in-vitro, but negative in in-vivo mutage-

nicity assays.

Carcinogenicity

Product:

Remarks: Limited evidence of carcinogenic effect, Repeated skin contact has resulted in irritation and skin cancer in animals.

IARC No component of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

ACGIH Confirmed animal carcinogen with unknown relevance to hu-

mans

Fuels, diesel 68334-30-5

OSHANo component of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential carcino-

gen by OSHA.

NTP No component of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.

Reproductive toxicity

Product:

Remarks: Not expected to impair fertility., Not expected to be

a developmental toxicant.

STOT - single exposure

Product:

Remarks: Not classified.

STOT - repeated exposure

Product:

Target Organs: Blood, Thymus, Liver

Remarks: May cause damage to organs or organ systems through prolonged or repeated expo-

sure.

Aspiration toxicity

Product:

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Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

Further information

Product:

Remarks: Classifications by other authorities under varying regulatory frameworks may exist.

SECTION 12. ECOLOGICAL INFORMATION

Basis for assessment : Information given is based on a knowledge of the components

and the ecotoxicology of similar products.

Fuels are typically made from blending several refinery streams. Ecotoxicological studies have been carried out on a variety of hydrocarbon blends and streams but not those con-

taining additives.

Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual com-

ponent(s).

Ecotoxicity

Product:

Toxicity to fish (Acute toxic-

ity)

Remarks: Expected to be toxic: LL/EL/IL50 > 1 <= 10 mg/l

Toxicity to daphnia and other

aquatic invertebrates (Acute

toxicity)

Remarks: Expected to be toxic: LL/EL/IL50 > 1 <= 10 mg/l

Toxicity to algae (Acute toxic-

ity)

Remarks: Expected to be toxic: LL/EL/IL50 > 1 <= 10 mg/l

Toxicity to fish (Chronic toxic-

ity)

Remarks: NOEC/NOEL expected to be > 0.01 - <= 0.1 mg/l

(based on modeled data)

Toxicity to daphnia and other aquatic invertebrates (Chron-

ic toxicity)

Remarks: NOEC/NOEL expected to be > 0.1 - <= 1.0 mg/l

(based on modeled data)

Toxicity to bacteria (Acute

toxicity)

: Remarks: Expected to be practically non toxic:

LL/EL/IL50 > 100 mg/l

Persistence and degradability

Product:

Biodegradability : Remarks: Readily biodegradable.

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: Contains constituents with the potential to bioaccu-

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mulate.

Mobility in soil

Product:

Mobility Remarks: Partly evaporates from water or soil surfaces, but a

significant proportion will remain after one day.

If product enters soil, one or more constituents will be mobile

and may contaminate groundwater.

Large volumes may penetrate soil and could contaminate

groundwater. Floats on water.

Other adverse effects

no data available

Product:

Additional ecological informa- : Films formed on water may affect oxygen transfer and dam-

age organisms.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Recover or recycle if possible.

> Send to drum recoverer or metal reclaimer. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in com-

pliance with applicable regulations.

Drain container thoroughly. Do not dispose into the environ-

ment, in drains or in water courses

After draining, vent in a safe place away from sparks and fire.Do not dispose of tank water bottoms by allowing them to

drain into the ground.

Residues may cause an explosion hazard. Do not puncture, cut or weld uncleaned drums. This will result in soil and

groundwater contamination.

Waste arising from a spillage or tank cleaning should be disposed of in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand.

Contaminated packaging

Residues may cause an explosion hazard if heated above the flash point. Do not puncture, cut or weld uncleaned drums. Do not pollute the soil, water or environment with the waste

container.

Comply with any local recovery or waste disposal regulations. Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand.

Local legislation

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Remarks : Disposal should be in accordance with applicable regional,

national, and local laws and regulations.

Local regulations may be more stringent than regional or na-

tional requirements and must be complied with.

SECTION 14. TRANSPORT INFORMATION

National Regulations

US Department of Transportation Classification (49 CFR Parts 171-180)

UN/ID/NA number : UN 1202 Proper shipping name : GAS OIL

Class : 3
Packing group : III
Labels : 3
ERG Code : 128
Marine pollutant : no

Remarks : This material is an 'OIL' under 49 CFR Part 130 when trans-

ported in a container of 3500 gallon capacity or greater.

International Regulation

IATA-DGR

UN/ID No. : UN 1202 Proper shipping name : GAS OIL

Class : 3
Packing group : III
Labels : 3

IMDG-Code

UN number : UN 1202 Proper shipping name : GAS OIL

Class : 3
Packing group : III
Labels : 3
Marine pollutant : yes

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

Pollution category : Not applicable
Ship type : Not applicable
Product name : Not applicable
Special precautions : Not applicable

Special precautions for user

Remarks : Special Precautions: Refer to Chapter 7, Handling & Storage,

for special precautions which a user needs to be aware of or

needs to comply with in connection with transport.

Additional Information: MARPOL Annex 1 rules apply for bulk shipments by sea.

SECTION 15. REGULATORY INFORMATION

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

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OSHA Hazards : Combustible Liquid, Carcinogen

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Naphthalene	91-20-3	100	*
Cumene	98-82-8	5000	

^{*:} Calculated RQ exceeds reasonably attainable upper limit.

CERCLA Reportable Quantity

Calculated RQ exceeds reasonably attainable upper limit.

CERCLA Reportable Quantity

Shell classifies this material as an "oil" under the CERCLA Petroleum Exclusion, therefore releases to the environment are not reportable under CERCLA.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Fire Hazard

SARA 302 : No chemicals in this material are subject to the reporting

requirements of SARA Title III, Section 302.

SARA 313 : The following components are subject to reporting levels es-

tablished by SARA Title III, Section 313:

Naphthalene 91-20-3 0.5 %

Clean Water Act

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

Naphthalene 91-20-3 0.5 %

Pennsylvania Right To Know

 Fuels, diesel
 68334-30-5

 Cumene
 98-82-8

 Naphthalene
 91-20-3

New Jersey Right To Know

Naphthalene 91-20-3

California Prop 65 WARNING! This product contains a chemical known to the

State of California to cause cancer.

Other regulations : IARC has classified diesel exhaust emissions as a Class 1

carcinogen - carcinogenic to humans. Steps should be taken to prevent personal exposure to diesel exhaust emissions.

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Version 2.0 Revision Date: 04/23/2015 Print Date: 05/21/2015

SECTION 16. OTHER INFORMATION

Further information

NFPA Rating (Health, Fire, Reac- 2, 2, 0 tivity)

This product is intended for use in closed systems only.

Due to the conversion of this product to GHS classification and labelling, there has been a significant change to the nature of the information presented in chapter 2.

Abbreviations and Acronyms : The standard abbreviations and acronyms used in this document can be looked up in reference literature (e.g. scientific dictionaries) and/or websites.

> ACGIH = American Conference of Governmental Industrial **Hygienists**

ADR = European Agreement concerning the International Carriage of Dangerous Goods by Road

AICS = Australian Inventory of Chemical Substances

ASTM = American Society for Testing and Materials

BEL = Biological exposure limits

BTEX = Benzene, Toluene, Ethylbenzene, Xylenes

CAS = Chemical Abstracts Service

CEFIC = European Chemical Industry Council

CLP = Classification Packaging and Labelling

COC = Cleveland Open-Cup

DIN = Deutsches Institut fur Normung

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

DSL = Canada Domestic Substance List

EC = European Commission

EC50 = Effective Concentration fifty

ECETOC = European Center on Ecotoxicology and Toxicology Of Chemicals

ECHA = European Chemicals Agency

EINECS = The European Inventory of Existing Commercial

Chemical Substances

EL50 = Effective Loading fifty

ENCS = Japanese Existing and New Chemical Substances Inventory

EWC = European Waste Code

GHS = Globally Harmonised System of Classification and Labelling of Chemicals

IARC = International Agency for Research on Cancer

IATA = International Air Transport Association

IC50 = Inhibitory Concentration fifty

IL50 = Inhibitory Level fifty

IMDG = International Maritime Dangerous Goods

INV = Chinese Chemicals Inventory

IP346 = Institute of Petroleum test method N° 346 for the determination of polycyclic aromatics DMSO-extractables

KECI = Korea Existing Chemicals Inventory

LC50 = Lethal Concentration fifty

LD50 = Lethal Dose fifty per cent.

LL/EL/IL = Lethal Loading/Effective Loading/Inhibitory loading

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According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Version 2.0 Revision Date: 04/23/2015 Print Date: 05/21/2015

LL50 = Lethal Loading fifty

MARPOL = International Convention for the Prevention of

Pollution From Ships

NOEC/NOEL = No Observed Effect Concentration / No Ob-

served Effect Level

OE_HPV = Occupational Exposure - High Production Volume

PBT = Persistent, Bioaccumulative and Toxic

PICCS = Philippine Inventory of Chemicals and Chemical

Substances

PNEC = Predicted No Effect Concentration

REACH = Registration Evaluation And Authorisation Of

Chemicals

RID = Regulations Relating to International Carriage of Dan-

gerous Goods by Rail

SKIN_DES = Skin Designation STEL = Short term exposure limit

TRA = Targeted Risk Assessment
TSCA = US Toxic Substances Control Act

TWA = Time-Weighted Average

vPvB = very Persistent and very Bioaccumulative

Revision Date : 04/23/2015

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.