


<p>TOTAL UK LTD</p> <p>MATERIAL SAFETY DATA SHEET</p>	
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DERV
 ULTRA LOW SULPHUR DERV
 GAS OIL CI
 ULTRA LOW SULPHUR GAS OIL
 MARINE GAS OIL
 MARINE DIESEL OIL

BS EN 590
 BS EN 590
 BS 2869: CLASS A2 & D
 EN 590
 ISO 8217 : DMA
 ISO 8217 : DMB

1 IDENTIFICATION OF THE SUBSTANCE & OF THE COMPANY / UNDERTAKING

IDENTIFICATION OF THE SUBSTANCE OR PREPARATION:

All are middle distillate-type fuels. Derv is a gas oil for use in on-road automotive vehicles. Gas Oil CI and Marine Diesel and Gas Oils are used in stationary diesel engines in the industrial and marine markets, for off-road use and as a fuel for heating boilers and gas turbines.

Contains:

Fuels, Diesel: CAS No. 68334-30-5

EINECS No. 269-822-7

COMPANY IDENTIFICATION:

Total UK Ltd.
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2 COMPOSITION / INFORMATION ON INGREDIENTS:

Complex mixtures of distillate hydrocarbons mainly paraffinic, naphthenic and aromatic in the range C10-C28. Catalytically and thermally cracked hydrocarbons may be present. Included may be small concentrations of cetane number improvers (organic nitrates), flow improvers (ethylene vinyl acetate copolymers), a lubricity additive (long-chain ester), silicone anti-foam additives and HM C&E markers/dye. These additives do not contribute any additional hazard.

3 HAZARDS IDENTIFICATION

These oils, particularly when catalytically and thermally cracked hydrocarbons are present, may contain polycyclic aromatic hydrocarbons (PCAs); some PCAs have been shown to have a potential to cause skin cancer (category 3 carcinogen). There are small concentrations of cetane no. improvers, flow improvers, anti-foam and detergent additives and marker/dye that are not considered to represent a health risk.

Injection of fuel under the skin may have serious medical effects.

Classified as dangerous for the environment.

4 FIRST AID MEASURES

TYPE OF EXPOSURE

Ingestion

The swallowing of small amounts is unlikely to have adverse effects; larger amounts may cause irritation with diarrhoea and vomiting.

Skin

Unlikely to cause irritation on single contact. Prolonged or repeated contact may cause dermatitis which could eventually lead to irreversible skin disorders.

Injection of fuel under pressure through the skin may have serious effects which at first may not seem serious but, within hours, may become very painful.

Eyes

May cause irritation with short-term redness and stinging.

Inhalation

Fumes or vapour may cause irritation to eyes and mucous membranes, and drowsiness leading to loss of consciousness.

FIRST AID MEASURES

Ingestion

Wash mouth out with water and give water to drink. If a large amount has been swallowed get medical advice. **DO NOT INDUCE VOMITING BECAUSE OF THE DANGER OF ASPIRATION.**

Skin

Wash skin as soon as possible with soap and water. Change contaminated clothing and launder before reuse. Get medical advice if irritation persists.

Any injection of fuel under the skin should be considered an **EMERGENCY** - get Medical Advice **URGENTLY**.

Eyes

Wash out thoroughly with large amounts of water. If redness and/or irritation continues get medical advice.

Inhalation

If inhalation of vapour causes irritation or drowsiness remove to fresh air. Get medical advice if the symptoms continue.

5 FIRE-FIGHTING MEASURES

Extinguish with Dry Powder, Foam or Water Fog. For small fires use CO₂

Do not use water jets

Note - Flash Point 60°C.

Fires in closed or confined spaces should be tackled by trained personnel who should wear breathing apparatus.

6 ACCIDENTAL RELEASE MEASURES

Treat any spillage as a fire hazard. Spray, vapour or mist can be a potential fire or explosion hazard.

May cause damage to surfaces making them SLIPPERY.

Contain spillage - do not wash spillage down drain. Absorb using absorbent clay, diatomaceous clay or other suitable absorbent.

7 HANDLING AND STORAGE**7.1 Handling**

Gas Oils and derv are designed to be used in closed systems. Avoid skin contact when refuelling vehicles or working on fuel system components. Where exposure is likely PROTECTIVE CLOTHING should be worn including impervious GLOVES and EYE PROTECTION. Ensure good ventilation.

7.2 Storage

The design, construction and maintenance of bulk storage and handling facilities are covered by codes of practice published by the Institute of Petroleum, British Standards Institution and the Health and Safety Executive.

Drums should be stored on their sides on racks preferably under cover, out of direct sunlight, in well ventilated conditions.

Other types of containers should be stored under cover out of direct sunlight, in well ventilated conditions. Care should be taken to avoid over-stacking.

8 EXPOSURE CONTROL / PERSONAL PROTECTION

Where prolonged or repeated exposure is likely PROTECTIVE CLOTHING should be worn including impervious GLOVES and EYE PROTECTION.

Respiratory protection - Unlikely to be required in normal use but ensure good ventilation - note Flash Point 60°C min. It is suggested that exposure is kept well below the level of Oil Mist quoted in the current HSE Guidance Note EH40:

Long term exposure limit - (8 hour TWA reference period) 5 milligrams per cubic metre.

Short term exposure limit - (15 minute reference period) - 10 milligrams per cubic metre.

Hand and skin protection - Hand and skin protection recommended at all times. Where exposure is likely protective clothing must be worn, including nitrile gloves approved to BS EN 374 with a breakthrough time of >360 minutes.

Eye protection - Eye protection approved to BS EN 166 is recommended at all times

9 PHYSICAL AND CHEMICAL PROPERTIES

Typical properties:

Appearance	Straw to amber fluid; may be dyed red
Odour	Characteristic
pH	not applicable
Boiling Range °C	160 - 375
Flash Point (PMC) °C	60 min
Flammability Limits % vol	1 - 6
Auto ignition temperature °C	approx. 220
Explosive properties	not applicable
Oxidising properties	not applicable
Reid Vapour Pressure at 37.8 °C kPa	< 0.1
Density at 15°C	0.82 - 0.87
Solubility - water	Very low
- fat	Not available
Partition coefficient - Log Pow	3 - >6 for components
Viscosity cSt @ 40°C	1.5 - 7
Vapour density (relative to air)	> 5
Evaporation rate	Extremely low

10 STABILITY AND REACTIVITY

Conditions to Avoid - heat (Note: Flash Point 60°C min).

Materials to Avoid - may react with strong oxidising materials.

Hazardous Decomposition Products - thermal decomposition may lead to the formation of a multiplicity of compounds some of which may be hazardous. With incomplete combustion smoke and hazardous fumes and gases, including carbon monoxide may be formed.

11 TOXICOLOGICAL INFORMATION

Toxicity following single exposure (orally, dermally or by inhalation) to gas oils is of a low order. When gas oils contain cracked components they are classified as category 3 carcinogens. With the use of good occupational and hygiene practices any risk will be minimal.

12 ECOLOGICAL INFORMATION

Expected to harm aquatic organisms, may cause long-term effects in the aquatic environment. May bioaccumulate; films formed on water may affect oxygen transfer and damage organisms. Likely to biodegrade slowly.

13 DISPOSAL CONSIDERATIONS

Dispose by incineration or by methods approved by Local Authority.
Do not discharge into the public drainage system, or marine and inland waterways.
Marine Fuels should be disposed of in accordance with MARPOL Regulations.

14 TRANSPORT INFORMATION

of our knowledge. The customer is strongly advised to observe and ensure that its employees and customers observe all directions contained herein. However, no warranty is made or implied that the information is accurate or complete and no liability will be accepted whatsoever - (other than liability in respect of the matters referred to in Section 2 Unfair Contract Terms Act 1977) arising out of the use of the information or the products designated herein. Where third party products are used in conjunction with or instead of products produced or supplied by Total UK Ltd. or its subsidiary companies, the customers should himself obtain all necessary technical, health and safety information about such products from the third party.

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Gas Oil / Derv