

## Safety data sheet

### 1. PRODUCT INFORMATION

Product Name	Diesel Aid
Company	<b>United Diesel Fuel Injection Services</b>
Address	<b>Unit 6, Leaton Industrial Estate, Bomere Heath, Shropshire, SY4 3AP</b>
Telephone No	(+44) (0)1939 291155 (not 24 hours)
Fax No	(+44) (0)1939 290791

### 2. COMPOSITION

Comprises a blend of flow improvers, cetane improvers and other performance additives for use with diesel fuels.

Components include:-

	CAS No.	EINECS	R Phrases	% age
2 – Ethyl Hexyl Nitrate	-	-	R20/21, R44	5 – 20
2 – Butoxy ethanol	111-76-2	203-905-0	R20/21/22, R37	15 – 35
Naphtha (Petroleum) Hydro-de sulphurised (Heavy)	64742-82-1	265-185-4	R65, R66	20 - 35

### 3. HAZARDS

The product is classified as harmful under applicable law. It is harmful by inhalation, in contact with the skin and if swallowed. When swallowed the product has potential to cause lung damage. Furthermore irritation of the respiratory system is possible from inhalation of vapours. Other effects of inhalation may be headaches, dizziness, nausea and possibly reduced blood pressure.

The product may also present an explosion risk if heated under confinement. Toxic and/or hazardous decomposition products may be formed when strongly heated or when burnt e.g. in the event of a fire. Precautions necessary involve storing in a cool place away from sources of ignition. It should never be exposed to elevated temperatures during storage. Precautions are also necessary to prevent inhalation of the vapours and to prevent skin contact.

### 4. FIRST AID MEASURES

Inhalation	Remove to fresh air. Give oxygen if necessary and seek medical advice.
Skin contact	Wash immediately from skin with soap and water. If irritation occurs or persists seek medical advice.
Eye contact	Rinse immediately with copious amounts of water and seek medical advice.
Ingestion	Give water to drink. DO NOT INDUCE VOMITING. Admit immediately to hospital and show this Health & Safety Sheet.
Other	Remove and dry clean any contaminated clothing.

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### 5. FIRE-FIGHTING MEASURES

The product is not classified as flammable, but is inherently combustible and may present an explosion risk if heated under confinement. In an intense fire beware of bursting drums, the result of which would be to increase the severity of the fire.

Extinguishing Media	Use dry chemicals, carbon dioxide or foam. Prevent water used in spray from entering water courses.
Not to be used	Direct water jet
Special Measures	Wear self contained breathing apparatus to avoid inhalation of hazardous/toxic decomposition products. Decomposition products are likely to include oxids of carbon, nitrogen and phosphorus.

In the event that drums or storage tanks are subjected to excessive heat e.g. in the event of a fire, a cooling water system of the deluge or sprinkler type with sufficient capacity to blanket the surface of bulk storage tanks and drums at a minimum rate of 0.25 gpm per square foot should be provided. Cooling water, if applied before the product reaches 100°C should prevent containers from rupturing.

### 6. ACCIDENTAL RELEASE MEASURES

Contain and collect spillage. Failure to contain the release should be notified immediately to the local waste authority and/or the Environment Agency. A spillage must be retrieved, if necessary with the help of absorbent material such as floor granules. Burn under controlled conditions or dispose of at an appropriate waste disposal facility in accordance with current applicable laws and regulations.

### 7. HANDLING & STORAGE

Winter Diesel Aid is essentially stable at normal ambient temperatures but when exposed to heat the risk of decomposition increases significantly with temperature. Exothermal decomposition is likely to occur at elevated temperatures. In the event of an intense fire this would increase the severity of the fire. The explosion risk of the product is low in closed containers at normal ambient temperatures.

Handling	The product should be handled cold and in well ventilated areas. Protective gloves overalls and goggles should be worn when handling the product. Inhalation of the vapours should be avoided. When pumping or blending, the equipment should be fitted with an appropriate pressure relieving equipment to prevent potential heat build up in the event of equipment malfunction. Mechanical ventilation is recommended. Local exhaust is required at the source of vapours.
Storage	Store at temperatures below 40°C. At elevated temperatures an exothermic reaction may occur, causing a rapid rise in pressure and temperature. Keep containers tightly closed in a cool, well ventilated place.
Materials/Conditions To avoid	Avoid storage at elevated temperatures, avoid strong oxidising agents. DO NOT heat under confinement.

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### 8. EXPOSURE CONTROLS & PERSONAL PROTECTION

Use controls to minimise or prevent aerosol and vapour generation.

OEL 8hr T.W.A value (2-Ethyl Hexyl Nitrate): 1ppm

MEL (2-butoxy ethanol): 25ppm.

Respiratory Protection	Use HSE approved respiratory protective equipment where significant aerosol or vapour is generated.
Eye Protection	Wear chemical goggles and face shield.
Hands	Wear suitable protective gloves.

### 9. PHYSICAL & CHEMICAL PROPERTIES: typical data

Appearance at 20°C	Mobile liquid	Odour	Solvent/ester
Density at 15°C	0.882	pH	Neutral
Viscosity at 40°C	2 – 8 cSt	Vapour Pressure	<10mm Hg
Flash Point (ASTM D93)	90°C		
Solubility	Partially soluble in polar and non-polar solvents.		

### 10. STABILITY & REACTIVITY

Hazardous Reactions Exothermic reaction may take place at temperatures exceeding 100°C. This may cause a further rise in temperature and a rapid rise in pressure.

Thermal Decomposition Rapid decomposition above 100°C which may lead to an explosion hazards if heated in confinement.

Hazardous decomposition products likely to be formed on heating: Carbon monoxide, carbon dioxide, oxides of nitrogen, phosphorus and sulphur, hydrogen sulphide.

### 11. TOXICOLOGICAL INFORMATION

Harmful by inhalation in contact with skin and if swallowed.

LD50 (oral, rat) >4000 mg/kg (by analogy)

LD50 (dermal, rabbit) > 2000 mg/kg (by analogy)

Eye Irritant

Vapour has anaesthetic properties above the maximum exposure limit. Nausea and dizziness may be experienced if exposed to the vapours at lower levels. Vapours have the ability to reduce blood pressure.

### 12. ECOLOGICAL INFORMATION

Persistence/ Degradability	Not readily biodegradable, but inherently biodegradable. The product contains components that may be persistent in the environment.
Ecotoxicity	Has partial water solubility. Spills may form a film on water surface, causing impaired oxygen transfer. The product may impair waste water biological treatment systems.

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### 13. DISPOSAL CONSIDERATION

Dispose of in a safe manner in accordance with Local/National regulations. Seek advice from Local waste authority before disposing of the product. Dispose of via an appropriate waste disposal facility. Under no circumstances should this product be disposed of by putting into drains, soil or water courses.

### 14. TRANSPORT INFORMATION

U.N. Number:	3082	Packaging Group:	III
Shipping Name:	Environmentally Hazardous substance liquid. N.O.S (contains 2-Ethyl hexyl nitrate)	EEC number	-
IMO Class:	9	Marine Pollutant:	Yes
ADR/RID Class:	9	ICAO/IATA Class:	9
Trem Card	Yes		

### 15. REGULATORY INFORMATION

Classification	Harmful
Risk Phrases	R20/21/22: Harmful by inhalation, in contact with skin and if swallowed. R65: May cause lung damage if swallowed. R37: Irritant to respiratory system. R44: Risk of explosion if heated under confinement.
Safety Phrases	S15: Keep away from heat. S24/25: Avoid contact with skin and eyes. S23: Do not breathe vapour. S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.
Statutory Instruments	The Health & Safety at work act 1974. Consumer Protection act 1987. Environmental Protection act 1990. COSHH Regulations 1988. CHIP Regulations 1993.

### 16. OTHER INFORMATION

The product is supplied as a diesel fuel additive.

### 17. AUDIT TRAIL

Original Issued date:	30.10.01	
Revision: 0	Date: N/A	Change: N/A

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