

# TABLE OF CONTENTS

1.	<b>SAFETY DATA SHEET</b>	
1.1	PRODUCT AND COMPANY INFORMATION.....	1-1
1.2	HAZARDS.....	1-1
1.3	COMPOSITION.....	1-1
1.4	FIRST AID MEASURES.....	1-1
1.5	FIRE-FIGHTING MEASURES.....	1-2
1.6	ACCIDENTAL RELEASE MEASURES.....	1-2
1.7	HANDLING & STORAGE.....	1-2
1.8	EXPOSURE CONTROLS & PERSONAL PROTECTION.....	1-2
1.9	PHYSICAL & CHEMICAL PROPERTIES: typical data.....	1-3
1.10	STABILITY & REACTIVITY.....	1-3
1.11	TOXICOLOGICAL INFORMATION.....	1-3
1.12	ECOLOGICAL INFORMATION.....	1-3
1.13	DISPOSAL CONSIDERATION.....	1-4
1.14	TRANSPORT INFORMATION.....	1-4
1.15	REGULATORY INFORMATION.....	1-4
1.16	OTHER INFORMATION.....	1-5
1.17	DISCLAIMER.....	1-5

# SAFETY DATA SHEET

## 1.1 PRODUCT AND COMPANY INFORMATION

Product Name	Diesel Calibration Fluid (HAD400 & HAD401)
Application	Diesel Calibration Fluid for Diesel Test Equipment
Company	Delphi Diesel Aftermarket
Address	Spartan Close, Warwick, CV34 6AG, United Kingdom
Telephone No	+44 (0)1926 472991
Fax No	+44 (0)1926 472999
Email	dds.enquiries@delphi.com

## 1.2 HAZARDS

Health Hazard	Harmful: may cause lung damage if swallowed. Repeated exposure may cause skin dryness or cracking.
Other Hazards	The product may be harmful to aquatic organisms. The product can burn when strongly heated. Hazardous decomposition products may be formed.

## 1.3 COMPOSITION

Blend of aliphatic hydrocarbon solvents/light mineral oils with corrosion and oxidation inhibitors.

Name	EINECS No.	% Mass	Symbols	R Phrases
Distillates (petroleum), hydrotreated light: kerosine unspecified.	265-149-8	20 - 50	Xn	R65, R66
Distillates (petroleum), hydrotreated light: kerosine unspecified.	265-148-2	20 - 50	Xn	R65
Highly refined white mineral Oil (Petroleum)	295-550-3	15 - 30	Xn	R65
2-(2-heptadec-8-enyl-2-imidazolin-1-yl) ethanol	202-414-9	<1.0	C; N	R22, R34, R50/53

## 1.4 FIRST AID MEASURES

Inhalation	If inhalation of mist fumes or vapour causes irritation to the nose or throat or coughing remove to fresh air. If symptoms persist obtain medical advice.
Skin contact	Wash skin thoroughly using soap and water. Change contaminated clothing.
Eye contact	Rinse with plenty of water for at least 10 minutes, ensuring eyelids are held open and contact lenses are removed. Seek medical attention if irritation or other symptoms occur and/or persist.
Ingestion	Seek medical attention if large amounts are swallowed. <b>DO NOT INDUCE VOMITING.</b> If vomiting occurs seek medical attention immediately and keep the head low so stomach vomit does not enter the lungs.

# SAFETY DATA SHEET

## 1.5 FIRE-FIGHTING MEASURES

Extinguishing Media	Use carbon dioxide, foam or water spray. Prevent water used in spray from entering watercourses.
Not to be used	Direct water jet. (Use water only to keep fire exposed containers cool.)
Special fire fighting procedures	In the event of a large fire self-contained breathing apparatus should be worn.
WARNING	Heat from a fire could possible result in drums bursting.

**Note:** In the event of a fire hazardous decomposition products may be formed, including oxides of carbon and nitrogen, ammonia and other unidentified products.

## 1.6 ACCIDENTAL RELEASE MEASURES

Contain and collect spillage with help of absorbent materials such as floor granules. Protect drains from potential spills to minimise contamination. If spillage enters drains or water courses inform the local authorities as appropriate. Product should be disposed of according to [section 1.13](#)

## 1.7 HANDLING & STORAGE

Handling	Precautions should be taken against skin and eye contact. Wear impervious gloves (PVC, nitrile rubber). Wear chemical goggles where a risk of splashing occurs. Avoid inhalation of vapour mist or fume. Wear suitable overalls and remove and dry-clean contaminated clothing. Wear safety shoes when handling containers.
Respiratory Protection	Use Regulatory Authority approved respiratory protective equipment where significant aerosol or vapour is generated.
Storage	Store away from sources of strong heat and strong oxidising chemicals. Keep containers tightly closed in a cool dry, well ventilated place. Take precautionary measures to prevent spills into drains, soil or water. External tanks or stillage should be bunded.

## 1.8 EXPOSURE CONTROLS & PERSONAL PROTECTION

Ensure good ventilation. Comply with current local occupation exposure limit. In the UK an exposure limit exists of 5mg/m<sup>3</sup> (8hr T.W.A value) EH40 for mineral oil. Where there is not an established exposure limit it is recommended that oil mists are kept below this value.

Respiratory Protection	Use Regulatory Authority approved respiratory protective equipment where significant aerosol or vapour is generated.
Eye Protection	Wear protective chemical safety spectacles when handling heated product or if risk of splashing exists.
Skin Protection	Prolonged and repeated skin contact should be avoided by the use of clean gloves (with adequate resistance to mineral oil and hydrocarbon solvents) and overalls.
Hand Protection	Protective gloves (PVC, Nitrile rubber). For further information consult glove manufacturer for recommendations of glove type associated with your particular application so that break through times can be assessed. Show this data sheet.
General Protection	Avoid inhalation of mists, fumes or vapour generated during use. Avoid contact with eyes. Avoid contact with skin and observe good personal hygiene. Change heavily contaminated gloves. Use single-use disposable cloths and discard when soiled. Wash hands thoroughly after use and always wash hands before eating, drinking or using the toilet.

# SAFETY DATA SHEET

## 1.9 PHYSICAL & CHEMICAL PROPERTIES: typical data

Appearance at 20°C	Mobile, pale amber liquid
Odour	Mild
pH	Neutral
Density at 15°C	0.824 g/cm <sup>3</sup> typical
Viscosity at 40°C	2.5 cSt
Flash point (ASTM D93)	92°C typical
Auto-ignition temperature	> 230°C
Vapour pressure KPA 20°C	0.04
Solubility	Insoluble in water <0.1 g/l Soluble in mineral oil and non-polar solvents.

## 1.10 STABILITY & REACTIVITY

Hazardous Reactions	Products of this type are stable and unlikely to react in a hazardous manner under normal conditions of use.
Reactivity	Avoid contact with strong oxidising agents.
Hazardous decomposition products, which can be formed on heating: Carbon monoxide, carbon dioxide, oxides of nitrogen, ammonia plus other unidentified products.	

## 1.11 TOXICOLOGICAL INFORMATION

Eyes	Unlikely to cause more than transient stinging or redness if accidental eye contact occurs.
Skin	Unlikely to cause harm to the skin on brief or occasional contact but prolonged or repeated exposure may lead to skin dryness, cracking and possible dermatitis.
Inhalation	At normal ambient temperatures is unlikely to cause inhalation hazard because of low volatility. At higher temperatures or where significant vapour exists product may cause headaches, drowsiness, nausea and vomiting.
Ingestion	Whilst the product is of a low order of toxicity, significant ingestion may lead to irritation of the mouth, throat and respiratory tract. Aspiration into the lungs e.g. during vomiting may cause pulmonary oedema (aspiration pneumonia). Oil deposits in the lungs may lead to fibrosis and reduced pulmonary function.
Other	The components used in this formulation are of low order of toxicity. LD50 (RAT) oral greater than 5g/kg.

## 1.12 ECOLOGICAL INFORMATION

Mobility	Some components may penetrate the soil causing ground water contamination.
Degradability	Inherently but not readily biodegradable. Components vary from readily biodegradable to not very biodegradable.
Bio accumulation	No evidence to suggest bio accumulation will occur.
Aquatic toxicity	Spills on water will form a film which may affect oxygen transfer and damage organisms. Small spills will disperse by evaporation and biodegradation. Components may be toxic to aquatic organisms.

# SAFETY DATA SHEET

## 1.13 DISPOSAL CONSIDERATION

Waste	Send to a Registered Waste Disposal Site using the services of a Registered Waste Disposal Contractor. Ensure conformance with local and national regulations.
Packaging	Labels should not be removed from containers until they have been cleaned. Empty containers may contain hazardous residues. Ensure conformance with local and national regulations.
Specific Advice	As supplied material should be considered as Special Waste and Disposal should conform with the relevant Regulations.
General	Avoid release to the environment. Under no circumstances should this product be disposed of by putting into drains soil or water courses.

## 1.14 TRANSPORT INFORMATION

U.N. Number	N/A	Packaging Group	N/A
Shipping Name	N/A	EEC Number	N/A
IMO Class	N/A	Marine Pollutant	No
ADR/RID	N/A	ICAO/IATA	N/A
Trem Card	N/A	Emergency Action	

## 1.15 REGULATORY INFORMATION

Classification	Harmful Xn
Risk Phrase	R65 Harmful, may cause lung damage if swallowed. R66 Repeated exposure may cause skin dryness or cracking. R52/53 Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment.
Safety Phrase	S23 Do not breath gas/fumes/vapour/spray. S24 Avoid contact with skin and eyes. S37 Wear suitable gloves. S43 In case of fire use sand, earth, foam or water fog. S60 This material and its container must be disposed of as hazardous waste. S61 Avoid release to the environment. S62 If swallowed do not induce vomiting: seek medical advice immediately and show the container or label.

## 1.16 OTHER INFORMATION

R Phrases used in [section 1.3](#).

R22 Harmful if swallowed.

R34 Causes burns.

R65 Harmful, may cause lung damage if swallowed.

R66 Repeated exposure may cause skin dryness or cracking.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## 1.17 DISCLAIMER

This information is, to the best of Delphi Diesel Systems' knowledge, correct and is intended to describe the product requirements.

Since the conditions of use are outside Delphi Diesel Systems' control any recommendations or suggestions are made without guarantee and Delphi Diesel Systems Ltd disclaims any liability for loss or damage suffered from use of this information.

Customers must satisfy themselves that the product is suitable for a particular purpose.

Furthermore, nothing contained herein shall be constructed as a recommendation to use any product in conflict with existing patents.