

SAFETY DATA SHEET**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Product name HLX 40
Product code 454033-BE01
SDS no. 454033
Product type Liquid.

1.2 Relevant identified uses of the substance or mixture and uses advised against

**Use of the substance/
mixture** Marine engine oil
 For specific application advice see appropriate Technical Data Sheet or consult our company representative.

1.3 Details of the supplier of the safety data sheet

Supplier Castrol Marine, a trading name of BP Marine Limited
 Chertsey Road
 Sunbury-on-Thames
 Middlesex
 TW16 7LN
 United Kingdom
E-mail address MSDSadvice@bp.com

1.4 Emergency telephone number

**EMERGENCY
TELEPHONE NUMBER** Carechem:+44 (0) 1235 239 670 (24 hours)

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture**

Product definition Mixture
Classification according to Directive 1999/45/EC [DPD]

The product is not classified as dangerous according to Directive 1999/45/EC and its amendments.
 See sections 11 and 12 for more detailed information on health effects and symptoms and environmental hazards.

2.2 Label elements

Risk phrases This product is not classified according to EU legislation.
Safety phrases Not applicable.
**Supplemental label
elements** Safety data sheet available for professional user on request.

Special packaging requirements

**Containers to be fitted
with child-resistant
fastenings** Not applicable.
Tactile warning of danger Not applicable.

2.3 Other hazards

**Other hazards which do
not result in classification** Defatting to the skin.
 USED ENGINE OILS
 Used engine oil may contain hazardous components which have the potential to cause skin cancer.
 See Toxicological Information, section 11 of this Safety Data Sheet.

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SECTION 3: Composition/information on ingredients

Substance/mixture Mixture

Highly refined base oil (IP 346 DMSO extract < 3%). Proprietary performance additives.

Classification

Product/ingredient name	Identifiers	%	67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	Type
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)	REACH #: 01-2119493635-27 EC: 224-235-5 CAS: 4259-15-8	1 - <2.5	Xi; R41 N; R51/53	Eye Dam. 1, H318 Aquatic Chronic 2, H411	[1]
Calcium sulphonate	Not available.	1 - <5	Xi; R36	Eye Irrit. 2, H319	[1]

See Section 16 for the full text of the R-phrases declared above.

See Section 16 for the full text of the H statements declared above.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.

Skin contact

Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation develops.

Inhalation

If inhaled, remove to fresh air. Get medical attention if symptoms appear.

Ingestion

Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician

Treatment should in general be symptomatic and directed to relieving any effects.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

In case of fire, use foam, dry chemical or carbon dioxide extinguisher or spray.

Unsuitable extinguishing media

Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture

In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous combustion products

Combustion products may include the following:
carbon oxides (CO, CO₂) (carbon monoxide, carbon dioxide)
phosphorus oxides
sulphur oxides (SO, SO₂, etc.)

5.3 Advice for firefighters

Special precautions for fire-fighters

No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.

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SECTION 5: Firefighting measures

Special protective equipment for fire-fighters Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Floors may be slippery; use care to avoid falling. Put on appropriate personal protective equipment.

For emergency responders If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

Small spill Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill Immediately contact emergency personnel. Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections

See Section 1 for emergency contact information.
See Section 5 for firefighting measures.
See Section 8 for information on appropriate personal protective equipment.
See Section 12 for environmental precautions.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures Put on appropriate personal protective equipment.

Advice on general occupational hygiene Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store and use only in equipment/containers designed for use with this product. Keep away from heat and direct sunlight. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10).

Not suitable Prolonged exposure to elevated temperature.

7.3 Specific end use(s)

Recommendations See section 1.2 and Exposure scenarios in annex, if applicable.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

For information and guidance, the ACGIH values are included. For further information on these please consult your supplier. Whilst specific OELs for certain components may be shown in this section, other components may be present in any mist, vapour or dust produced. Therefore, the specific OELs may not be applicable to the product as a whole and are provided for guidance only.

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SECTION 8: Exposure controls/personal protection

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Derived No Effect Level

No DNELs/DMELs available.

Predicted No Effect Concentration

No PNECs available

8.2 Exposure controls

Appropriate engineering controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits.

All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.

Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards. The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory protection

Respiratory protective equipment is not normally required where there is adequate natural or local exhaust ventilation to control exposure.

In case of insufficient ventilation, wear suitable respiratory equipment.

The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Eye/face protection

Safety glasses with side shields.

Skin protection

Hand protection

Wear protective gloves if prolonged or repeated contact is likely.

Wear chemical resistant gloves.

Recommended: Nitrile gloves.

The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Skin and body

Use of protective clothing is good industrial practice.

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

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SECTION 8: Exposure controls/personal protection

Physical state	Liquid.
Colour	Amber.
Odour	Oily.
Odour threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Pour point	<-15 °C
Flash point	Closed cup: >200°C (>392°F) [Pensky-Martens.] Open cup: 244°C (471.2°F) [Cleveland.]
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	0.893
Solubility(ies)	insoluble in water.
Partition coefficient: n-octanol/water	>3
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Kinematic: 14 mm ² /s (14 cSt) at 100°C
Explosive properties	Not available.
Oxidising properties	Not available.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.
10.2 Chemical stability	The product is stable.
10.3 Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous polymerisation will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	Avoid all possible sources of ignition (spark or flame).
10.5 Incompatible materials	Reactive or incompatible with the following materials: oxidising materials.
10.6 Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Information on the likely routes of exposure	Routes of entry anticipated: Dermal, Inhalation.
Potential acute health effects	
Inhalation	Vapour inhalation under ambient conditions is not normally a problem due to low vapour pressure.
Ingestion	No known significant effects or critical hazards.
Skin contact	May cause skin dryness and irritation.

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SECTION 11: Toxicological information

Eye contact No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation No specific data.

Ingestion No specific data.

Skin contact Adverse symptoms may include the following:
irritation
dryness
cracking

Eye contact No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Inhalation Overexposure to the inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.

Ingestion Ingestion of large quantities may cause nausea and diarrhoea.

Skin contact Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.

Eye contact Potential risk of transient stinging or redness if accidental eye contact occurs.

Potential chronic health effects

General Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
USED ENGINE OILS
Combustion products resulting from the operation of internal combustion engines contaminate engine oils during use. Used engine oil may contain hazardous components which have the potential to cause skin cancer. Frequent or prolonged contact with all types and makes of used engine oil must therefore be avoided and a high standard of personal hygiene maintained.

Carcinogenicity No known significant effects or critical hazards.

Mutagenicity No known significant effects or critical hazards.

Developmental effects No known significant effects or critical hazards.

Fertility effects No known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

Environmental hazards Not classified as dangerous
Based on data available for this or related materials.

12.2 Persistence and degradability

Expected to be biodegradable.

12.3 Bioaccumulative potential

This product is not expected to bioaccumulate through food chains in the environment.

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) Not available.

Mobility Spillages may penetrate the soil causing ground water contamination.

12.5 Results of PBT and vPvB assessment

PBT Not applicable.

vPvB Not applicable.

12.6 Other adverse effects

Other ecological information Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Methods of disposal

The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Hazardous waste

Yes.

European waste catalogue (EWC)

Waste code	Waste designation
13 02 05*	mineral-based non-chlorinated engine, gear and lubricating oils

However, deviation from the intended use and/or the presence of any potential contaminants may require an alternative waste disposal code to be assigned by the end user.

Packaging

Methods of disposal

Dispose of via an authorised person/ licensed waste disposal contractor in accordance with local regulations. Recycle, if possible.

Special precautions

This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Empty containers represent a fire hazard as they may contain flammable product residues and vapour. Never weld, solder or braze empty containers. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Other information

At sea, used or unwanted product should be stored for eventual discharge into port approved waste oil disposal facilities.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.
Additional information	-	-	-	-

14.6 Special precautions for user Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Substances of very high concern

None of the components are listed.

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SECTION 15: Regulatory information

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Not applicable.

Other regulations

REACH Status

The company, as identified in Section 1, sells this product in the EU in compliance with the current requirements of REACH.

United States inventory (TSCA 8b)

All components are listed or exempted.

Australia inventory (AICS)

All components are listed or exempted.

Canada inventory

All components are listed or exempted.

China inventory (IECSC)

At least one component is not listed.

Japan inventory (ENCS)

All components are listed or exempted.

Korea inventory (KECI)

All components are listed or exempted.

Philippines inventory (PICCS)

At least one component is not listed.

15.2 Chemical Safety Assessment

This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
 ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
 ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 CAS = Chemical Abstracts Service
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 CSA = Chemical Safety Assessment
 CSR = Chemical Safety Report
 DMEL = Derived Minimal Effect Level
 DNEL = Derived No Effect Level
 DPD = Dangerous Preparations Directive [1999/45/EC]
 DSD = Dangerous Substances Directive [67/548/EEC]
 EINECS = European Inventory of Existing Commercial chemical Substances
 ES = Exposure Scenario
 EUH statement = CLP-specific Hazard statement
 EWC = European Waste Catalogue
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 OECD = Organisation for Economic Co-operation and Development
 PBT = Persistent, Bioaccumulative and Toxic
 PNEC = Predicted No Effect Concentration
 RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
 RRN = REACH Registration Number
 SADT = Self-Accelerating Decomposition Temperature
 SVHC = Substances of Very High Concern
 STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
 STOT-SE = Specific Target Organ Toxicity - Single Exposure
 TWA = Time weighted average
 UN = United Nations
 UVCB = Complex hydrocarbon substance
 VOC = Volatile Organic Compound
 vPvB = Very Persistent and Very Bioaccumulative

 318 Causes serious eye damage.
 H319 Causes serious eye irritation.
 H411 Toxic to aquatic life with long lasting effects.

Full text of abbreviated H statements

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SECTION 16: Other information

Full text of classifications [CLP/GHS]	Aquatic Chronic 2, H411 Eye Dam. 1, H318 Eye Irrit. 2, H319	AQUATIC TOXICITY (CHRONIC) - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
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Full text of abbreviated R phrases	R41- Risk of serious damage to eyes. R36- Irritating to eyes. R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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Full text of classifications [DSD/DPD]	Xi - Irritant N - Dangerous for the environment
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History

Date of issue/ Date of revision	14/03/2013.
Date of previous issue	14/11/2012.
Prepared by	Product Stewardship

 **Indicates information that has changed from previously issued version.**

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.