

# SAFETY DATA SHEET



Performance Bio HE 32 TG

## Section 1. Identification

**GHS product identifier** Performance Bio HE 32 TG

**Product code** 469024-US03

**SDS no.** 469024

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

**Use of the substance/  
mixture** Hydraulic fluid.

For specific application advice see appropriate Technical Data Sheet or consult our company representative.

**Manufacturer**

**Supplier** Castrol India Ltd  
Technopolis Knowledge Park Office  
PO Box 19411  
Mahakali Caves Rd  
Chakala, Andheri (E)  
Mumbai 400093

Telephone: +91 (022) 66984111/66984112

**EMERGENCY TELEPHONE  
NUMBER** Toll free: 00800 100 7479 (for use in India only - 24/7)  
Carechem Singapore: +65 3158 1198 (24/7)

## Section 2. Hazards identification

**GHS Classification** SKIN SENSITISATION - Category 1

**GHS label elements**

Hazard pictograms



**Signal word**

Warning

**Hazard statements**

H317 - May cause an allergic skin reaction.

**Precautionary statements**

**General**

Not applicable.

**Prevention**

P280 - Wear protective gloves.

P261 - Avoid breathing vapour.

P272 - Contaminated work clothing should not be allowed out of the workplace.

**Response**

P362 + P364 - Take off contaminated clothing and wash it before reuse.

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.

P333 + P313 - If skin irritation or rash occurs: Get medical attention.

**Storage**

Not applicable.

**Disposal**

P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Other hazards which do not  
result in classification**

Defatting to the skin.

Note: High Pressure Applications

Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency.

See 'Notes to physician' under First-Aid Measures, Section 4 of this Safety Data Sheet.

## Section 3. Composition/information on ingredients

**Substance/mixture** Mixture

Vegetable oil and additives

Ingredient name	%	CAS number
reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate	≤3	125643-61-0
O,O,O-Triphenyl phosphorothioate	≤3	597-82-0
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	<1	68411-46-1
dihydro-3-(tetrapropenyl)furan-2,5-dione	<1	26544-38-7
2,2'-(octadec-9-enylimino)bisethanol	<0.025	25307-17-9

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

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

## Section 4. First aid measures

### Description of necessary first aid measures

<b>Eye contact</b>	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.
<b>Inhalation</b>	If inhaled, remove to fresh air. Get medical attention if symptoms occur.
<b>Skin contact</b>	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Wash clothing before reuse. Clean shoes thoroughly before reuse. In the event of any complaints or symptoms, avoid further exposure. Get medical attention. If skin irritation or rash occurs: Get medical advice/attention.
<b>Ingestion</b>	Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Get medical attention if adverse health effects persist or are severe.
<b>Protection of first-aiders</b>	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

### Most important symptoms/effects, acute and delayed

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

### Indication of immediate medical attention and special treatment needed, if necessary

<b>Specific treatments</b>	No specific treatment.
<b>Notes to physician</b>	Treatment should in general be symptomatic and directed to relieving any effects.
	<b>Note: High Pressure Applications</b> Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discoloured and extremely painful with extensive subcutaneous necrosis.
	Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimise tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes.

## Section 5. Firefighting measures

### Extinguishing media

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

**Not suitable** Do not use water jet.

**Specific hazards arising from the chemical** In a fire or if heated, a pressure increase will occur and the container may burst.

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## Section 5. Firefighting measures

<b>Hazardous thermal decomposition products</b>	Combustion products may include the following: phosphorus oxides carbon oxides (CO, CO <sub>2</sub> ) (carbon monoxide, carbon dioxide) sulphur oxides (SO, SO <sub>2</sub> , etc.)
<b>Special precautions for fire-fighters</b>	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.
<b>Special protective equipment for fire-fighters</b>	Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	Contact 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. Avoid breathing vapour or mist. Provide adequate ventilation. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling.
<b>For emergency responders</b>	Entry into a confined space or poorly ventilated area contaminated with vapour, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. See also the information in "For non-emergency personnel".
<b>Environmental precautions</b>	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).

### Methods and material for containment and cleaning up

<b>Small spill</b>	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.
<b>Large spill</b>	Stop leak if without risk. Move containers from spill area. Approach the release from upwind. 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. Contaminated absorbent material may pose the same hazard as the spilt product. Dispose of via a licensed waste disposal contractor.

## Section 7. Handling and storage

### Precautions for safe handling

<b>Protective measures</b>	Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
<b>Advice on general occupational hygiene</b>	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. Contaminated work clothing should not be allowed out of the workplace. See also Section 8 for additional information on hygiene measures.
<b>Conditions for safe storage</b>	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.
<b>Not suitable</b>	Prolonged exposure to elevated temperature Ensure product is stored in covered area away from direct sunlight, heat, rain and water exposure.

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## Section 7. Handling and storage



## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

##### Ingredient name

None.

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.

#### Biological exposure indices

Ingredient name	Exposure indices
No exposure indices known.	

#### Recommended monitoring procedures

Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### Appropriate engineering controls

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations 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.

#### 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.

### 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. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Eye 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.

## Section 8. Exposure controls/personal protection

### Skin protection

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.

### Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

### Respiratory protection

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.

## Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### Appearance

<b>Physical state</b>	Liquid.																										
<b>Colour</b>	Yellow. [Light]																										
<b>Odour</b>	Not available.																										
<b>Odour threshold</b>	Not available.																										
<b>pH</b>	Not applicable.																										
<b>Melting point/freezing point</b>	Not available.																										
<b>Boiling point, initial boiling point, and boiling range</b>	Not available.																										
<b>Drop Point</b>	Not available.																										
<b>Pour point</b>	-33 °C																										
<b>Flash point</b>	Closed cup: >200°C (>392°F) [Pensky-Martens ASTM D 93]																										
<b>Evaporation rate</b>	Not available.																										
<b>Flammability</b>	Not applicable. Based on - Physical state																										
<b>Lower and upper explosion limit/flammability limit</b>	Not available.																										
<b>Vapour pressure</b>	<table><thead><tr><th rowspan="2">Ingredient name</th><th colspan="3">Vapour Pressure at 20°C</th><th colspan="3">Vapour pressure at 50°C</th></tr><tr><th>mm Hg</th><th>kPa</th><th>Method</th><th>mm Hg</th><th>kPa</th><th>Method</th></tr></thead><tbody><tr><td>O,O,O-Triphenyl phosphorothioate</td><td>0</td><td>0</td><td></td><td></td><td></td><td></td></tr></tbody></table>							Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C			mm Hg	kPa	Method	mm Hg	kPa	Method	O,O,O-Triphenyl phosphorothioate	0	0				
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	mm Hg	kPa	Method	mm Hg	kPa	Method																					
O,O,O-Triphenyl phosphorothioate	0	0																									
<b>Relative vapour density</b>	Not available.																										
<b>Relative density</b>	Not available.																										
<b>Density</b>	<1000 kg/m³ (<1 g/cm³) at 15.6°C																										
<b>Solubility(ies)</b>	<table><thead><tr><th>Media</th><th>Result</th></tr></thead><tbody><tr><td>water</td><td>Not soluble</td></tr></tbody></table>							Media	Result	water	Not soluble																
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water	Not soluble																										
<b>Partition coefficient: n-octanol/water</b>	Not applicable.																										
<b>Auto-ignition temperature</b>	<table><thead><tr><th>Ingredient name</th><th>°C</th><th>°F</th><th>Method</th></tr></thead><tbody><tr><td>reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate</td><td>365</td><td>689</td><td></td></tr></tbody></table>							Ingredient name	°C	°F	Method	reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate	365	689													
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<b>Decomposition temperature</b>	Not available.																										

## Section 9. Physical and chemical properties

<b>Viscosity</b>	Kinematic: 37 mm <sup>2</sup> /s (37 cSt) at 40°C Kinematic: 8.2 mm <sup>2</sup> /s (8.2 cSt) at 100°C (ASTM D 445)
<b>VOC</b>	0.46 g/l
<b>Particle characteristics</b>	

<b>Median particle size</b>	Not applicable.
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## Section 10. Stability and reactivity

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

## Section 11. Toxicological information

### Information on toxicological effects

#### Aspiration hazard

Not available.

<b>Information on likely routes of exposure</b>	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
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### Potential acute health effects

#### Eye contact

No known significant effects or critical hazards.

#### Inhalation

Vapour inhalation under ambient conditions is not normally a problem due to low vapour pressure.

#### Skin contact

Defatting to the skin. May cause skin dryness and irritation. May cause an allergic skin reaction.

#### Ingestion

No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

#### Eye contact

No specific data.

#### Inhalation

No specific data.

#### Skin contact

Adverse symptoms may include the following:  
irritation  
redness  
dryness  
cracking

#### Ingestion

No specific data.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

#### Eye contact

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

#### Inhalation

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

#### Skin contact

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

#### Ingestion

Ingestion of large quantities may cause nausea and diarrhoea.

### Potential chronic health effects

#### General

No known significant effects or critical hazards.

#### Carcinogenicity

No known significant effects or critical hazards.

#### Mutagenicity

No known significant effects or critical hazards.

#### Teratogenicity

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.

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## Section 12. Ecological information

**Environmental effects** No known significant effects or critical hazards.

**Persistence and degradability**

Expected to be biodegradable.

**Bioaccumulative potential**

Not available.

**Mobility** Liquid, insoluble in water.

**Other adverse effects** No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	<b>IMDG</b>	<b>IATA</b>
<b>UN number</b>	Not regulated.	Not regulated.
<b>UN proper shipping name</b>	-	-
<b>Transport hazard class(es)</b>	-	-
<b>Packing group</b>	-	-
<b>Environmental hazards</b>	No.	No.
<b>Additional information</b>	-	-

**Special precautions for user** Not available.

**Transport in bulk according to IMO instruments** Not available.

## Section 15. Regulatory information

**Regulation according to other foreign laws**

**REACH Status** For the REACH status of this product please consult your company contact, as identified in Section 1.

**Australia inventory (AIC)** At least one component is not listed.

**Canada inventory status** All components are listed or exempted.

**China inventory (IECSC)** All components are listed or exempted.

**Japan inventory (CSCL)** 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.

## Section 15. Regulatory information

Taiwan Chemical Substances Inventory (TCSI)	Not determined.
United States inventory (TSCA 8b)	All components are active or exempted.

## Section 16. Other information

### History

Date of issue/Date of revision	19/07/2024.
Date of previous issue	No previous validation.
Prepared by	Product Stewardship
Key to abbreviations	ACGIH = American Conference of Industrial Hygienists CAS Number = Chemical Abstracts Service Registry Number GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods OEL = Occupational Exposure Limit REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006] SDS = Safety Data Sheet STEL = Short term exposure limit TWA = Time weighted average UN Number = United Nations Number, a four digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods. Varies = may contain one or more of the following 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1

 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.