

Product name	Castrol 2T
SDS no.	458611
Use of the substance/mixture	Lubricant for two-stroke engines. For specific application advice see appropriate Technical Data Sheet or consult our company representative.
Supplier	Castrol India Limited Technopolis Knowledge Park Mahakali Caves Road Andheri (East), MUMBAI 400 093 Maharashtra, India
	Contact : +91 22 66984100
EMERGENCY TELEPHONE NUMBER	Toll free: 000800 100 7479 (for use in India only - 24 hours) Carechem Singapore:  +65 3158 1198 (24 hours)
E-mail address	MSDSadvice@bp.com

## 1. Identification of the substance/preparation and company/undertaking

### 2. Hazards identification

This preparation is not classified as dangerous according to Directive 1999/45/EC as amended and adapted.

Defatting to the skin.

NOTE: Product diluted with petrol must be handled with the same precautions used for petrol. Before mixing, the Safety Data Sheet for petrol should be consulted for any precautionary measures necessary.

See sections 11 and 12 for more detailed information on health effects and symptoms and environmental hazards.

## 3. Composition/information on ingredients

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

Chemical name	CAS no.	%	EINECS / ELINCS.	Classification	
Hydrocarbon Mixture	Mixture	20 - 50		Xn; R65 R66	[1] [2]
See Section 16 for the full text of the R-phrases dec	lared above.				
[1] Substance classified with a health or environmental haze	ard				
[2] Substance with a workplace exposure limit					
[3] PBT-substance					

[4] vPvB-substance

Additional hazards

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

### 4. 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.
Notes to physician	Treatment should in general be symptomatic and directed to relieving any effects.

## 5. Fire-fighting measures

Extinguishing media	
Suitable	In case of fire, use water fog, alcohol resistant foam, dry chemical or carbon dioxide extinguisher or spray.
Not suitable	Do not use water jet.
Hazardous decomposition products	Decomposition products may include the following materials: carbon dioxide carbon monoxide

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Unusual fire/explosion hazards	Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
Special fire-fighting procedures	Move containers from fire area if this can be done without risk. 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. Use water spray to keep fire-exposed containers cool.
Protection of 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.

#### 6. Accidental release measures

Personal precautions - For non-emergency personnel	Eliminate all ignition sources. Immediately 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. Floors may be slippery; use care to avoid falling. No flares, smoking or flames in hazard area. Put on appropriate personal protective equipment.
Personal precautions - 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".
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).
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. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.
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.
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.

## 7. Handling and storage

Handling - Protective measures	Put on appropriate personal protective equipment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. NOTE: Product diluted with petrol must be handled with the same precautionary measures against for petrol. Before mixing, the Safety Data Sheet for petrol should be consulted for any precautionary measures necessary.
Handling - 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.
Storage	Store and use only in equipment/containers designed for use with this product. Eliminate all ignition sources. 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. Separate from oxidising materials. Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Store in a segregated and approved area.
Not suitable	Prolonged exposure to elevated temperature.

## 8. Exposure controls/personal protection

Ingredient name	Occupational exposure limits
Hydrocarbon Mixture	ACGIH TLV (United States).
	TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Mist

#### **ACGIH TLVs**

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. **Exposure controls** 

Occupational exposure 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.

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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.
Personal protective equipment	
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.
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.
Eye protection	Safety glasses with side shields.
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.
Personal protective equipment (Pictograms)	

## 9. Physical and chemical properties

## General information

<u>Appearance</u>			
Physical state	Liquid.		
Colour	Green.		
Odour	Mild.		
Important health, safety and environmental information			
Flash point	Closed cup: >70°C (>158°F) [Pensky-Martens.]		
Viscosity	Kinematic: 45 mm <sup>2</sup> /s (45 cSt) at 40°C		
Pour point	-36 °C		
Density	<1000 kg/m³ (<1 g/cm³) at 15°C		
Solubility	insoluble in water.		

# 10. Stability and reactivity

Stability	The product is stable.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame).
Materials to avoid	Reactive or incompatible with the following materials: oxidising materials.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

# 11. Toxicological information

Acute toxicity	
Effects and symptoms	
Eyes	May cause eye irritation.
Skin	May cause skin irritation. May cause skin dryness and irritation.
Inhalation	May be harmful by inhalation if exposure to vapour, mists or fumes resulting from thermal decomposition products occurs.
Ingestion	Ingestion of large quantities may cause nausea and diarrhoea.
Chronic effects	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

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## 12. Ecological information

Persistence/degradability	Expected to be biodegradable.
Mobility	Spillages may penetrate the soil causing ground water contamination.
Bioaccumulative potential	This product is not expected to bioaccumulate through food chains in the environment.
Environmental hazards	Not classified as dangerous.
Other ecological information	Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

#### 13. Disposal considerations

Disposal considerations / Waste information / Waste 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. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

#### **Unused product**

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.

#### 14. Transport information

Not classified as hazardous for transport (ADR/RID, ADNR, IMDG, ICAO/IATA)

#### 15. Regulatory information

#### Label requirements Hazard symbol or symbols

Risk phrases	This product is not classified according to EU legislation.
Additional warning phrases	Safety data sheet available for professional user on request.
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)	At least one component is not listed.
Australia inventory (AICS)	At least one component is not listed.
Canada inventory	At least one component is not listed.
China inventory (IECSC)	At least one component is not listed.
Japan inventory (ENCS)	At least one component is not listed.
Korea inventory (KECI)	At least one component is not listed.
Philippines inventory (PICCS)	At least one component is not listed.

### 16. Other information

Full text of R-phrases referred to in sections 2 and 3 History	R65- Harmful: may cause lung damage if swallowed. R66- Repeated exposure may cause skin dryness or cracking.
Date of issue/ Date of revision	15/11/2012.
Date of previous issue	No previous validation.
Prepared by	Product Stewardship
Notice to reader	
Indicates information that has ch	anged from previously issued version

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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.

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