

Product name :	TOTAL RUBIA B 50	D 1
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MSDS number : 110138-05	Version : 1	Date : 12/02/2008
		Supercedes MSDS dated : 19/07/2005
PRODUCT LABELS		
LABELLING (standard or EU) :	Not Concerned	
R-phrases :	None	
S-phrases :	None	
TRANSPORT LABELLING :	Not Applicable	
1. IDENTIFICATION OF THE SU	BSTANCE/PREPARATION AND OF THE COMPANY U	UNDERTAKING
Name of the product :	TOTAL RUBIA B 50	
Code No :	SDG050	
Product application :	Engine Lubricating Oil	
Supplier :	Total Oil Asia-Pacific Pte. Ltd. 10 Pandan Avenue Singapore 609385	

Tel : (65) 6266 2800 Fax: (65) 6266 3800

#### 2. COMPOSITION/INFORMATION OF INGREDIENTS

#### PREPARATION

Chemical nature :

Petroleum-derived severely refined mineral-base product, in which the polycyclic aromatic hydrocarbons (PCA or PAH) content, measured by IP 346 is less than 3%

Substances presenting a health hazards:	EC No.	CAS No	Content	Symbol(s)	R-phrases
Zinc alkyl di thiophosphate	272-028-3	68649-42-3	< 0.6%	Xi, N	R-38, 41. 51/53

See section 16 for explanantions of R-phrases :

### **3. HAZARD IDENTIFICATION**

Health effects :	Under normal conditions of use, the product holds no danger of intoxication
Environmental impact :	Do not discard this product into the environment
Physical and chemical hazards :	No specific risk of fire or explosion under normal conditions of use

#### 4. FIRST AID MEASURES

IN CASE OF SERIOUS OR PERSISTENT MANIFESTATIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE

Inhalation :	Inhalation of heavy concentrations of vapour, fumes or spray, may cause mild irritation of the throat. Transport the person into fresh air, keep warm and allow to rest.
Skin contact :	Immediately remove all soiled or stained clothing. Wash the affected area immediately and repeatedly with soap and water.
Eye contact :	Keep eyes open and rinse immediately and repeatedly with water for at least 15 minutes.
Ingestion :	Possible risk of vomiting and diarrhoea. Do not induce vomiting to avoid the risk of aspiration into the respiratory tract.



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	Give nothing to drink.	
Aspiration :	If the product is believed to have entered the lungs (in case of vomiting, person to hospital for immediate care.	for example), take the
5. FIRE FIGHTING MEASURES		
Flash Point :	See heading 9	
Fire extinguishers media :		
- suitable :	Foam, carbon dioxide (CO2), powder.	
- not recommended :	Do not use water jet (stick jets) for extinguishing fire since they could h	elp to spread the flames.
Specific hazards :	Incomplete combustion and thermolysis produce gases of varying toxici various hydrocarbons, aldehydes and soot. These may be highly dangered Vapours can build explosive mixtures with air. Vapours are heavier than air and may spread on the ground to source of	ous if inhaled.
Protective measures for firefighter :	Insulated breathing apparatus must be worn in confined premises with h fumes and gases.	eavy concentrations of
Other :	The combustion residues and contaminated water for fire fighting have according to the local regulations.	to be disposed

### 6. ACCIDENTAL RELEASE MEASURES

See sections 8 and 13	
Personnel protection :	Ensure good ventilation. Remove sources of ignition. Do not smoke.
After spillage / leakage :	
- on the soil :	Surfaces on which the product has been spilled may become slippery. Do not allow the product to enter sewers or rivers or contaminate the soil. Recover with mechanical means such as pumps and skimmers.
- on water :	Floating absorbent material, then mechanical recovery. If the product is spilled in a river or in the sewers, notify the authorities of the possible presence of surface effluent.
Spill cleanup methods :	
- Recovery	Contain and collect the spilled product, sand the surfaces concerned if necessary. Contain and collect the spilled product with sand or any other inert absorbent material. In the event of a major spill, inform the competent authprities if the situation cannot be borught under control rapidly and efficiently.
- Elimination :	Dispose of waste in compliance with regulations. Avoid discharge of the material in a steam or a sewer or cause ground contamination.

### 7. HANDLING AND STORAGE

#### HANDLING :

- Prevention of user exposure :	Ventilate extensively if the formation of vapour, fumes, mist or aersol is a risk.
	Make all the necessary arrangement in order to reduce exposure risk, notably to products in use
	or to wastes.
	Keep away from combustive substances; keep away from food and beverages.



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- Prevention of fire and explosion :	Empty containers may contain flammable or explosive vapours. There is a fire hazard associated with rags, papers or any other material which become soaked with product. Avoid accumulation of these : they are to be disposed off safety after use	Ĩ
- Precautions :	Avoid static electricity build up with connection to earth. Set up machinery and equipment so as to avoid the risk of accidental spi machine parts and electrical contacts (on joints failure, for example).	ills or splashes onto hot
STORAGE :		
- Technical measures :	Make the necessary arrangements to prevent water and soil pollution.	
- Storage precautions :		
- Suitable :	Store at room temperature, protected against contact with water and moi any sources of ignition. Keep containers closed when not in use.	sture, and away from
- To be avoided:	Do not store exposed to the elements.	
- Incompatible products :	Dangerous reaction with strong oxidizing agents.	
- Packaging materials : - Recommended :	Use only hydrocarbon resistant containers, joints, pipes etc Keep in original container if possible.	

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Technical measures :	Use the product in a properly ventilated atmosphere. When working in enclosed place (tanks, reservoirs,), make sure that atmosphere is not suffocating and/ or wear recommended equipment.
Occupational exposure limit :	- oil mist : 10mg/m3, for 15 minutes - oil mist : 5mg/m3, for 8 hours
Hand protection :	Impermeable hydrocarbon-proof gloves. Recommended material: nitrile, neoprene. The break through times of the same type of glove of different manufacturers can be very different - even if the layer thickness is similar. Therefore the break through times have to be found out from the manufacturer of the pretective gloves themselves. The demands on the gloves are determined by the conditions in practice (e.g. multiple use, mechanical load, temperature, strength and duration of exposition). Before choosing suitable gloves, it is recommended that the user tests the gloves.
Eye protection :	Goggles, in case of splashing.
Skin and body (other than the hands) protection :	As required, wear a face mask, hydrocarbon-proof clothing, and safety boots (when handling drums). Don't wear ring, watches or anything similar which can retain the product and may give rise to skin conditions.
Hygienic work practices :	Avoid prolonged and repeated contact with the skin, especially with used or waste product. Immediately remove all soiled or stained clothing. If the product comes into contact with the skin, wash the affected area immediately and and repeatedly with soap and water. Use no abrasives, solvents or fuels. Do not use cloths stained with the product to dry hands. Do not put the product-soaked rags in the pockets of working clothes.



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Do not eat, drink or smoke while handling the product.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance :	Clear Liquid
Colour :	Yellow to Amber
Odour :	Characteristics
Density/Specific Gravity :	about 900 kg/m <sup>3</sup> at 15°C
Flash point :	>210°C (ASTM D92)
Auto-ignition temperature :	>250°C (ASTM E 659)
Comments on auto-ignition temperature :	This temperature may be significantly lower under particular conditions (slow oxidation on finely divided materials).
Comments on explosivity :	Not applicable
Solubility : - in water : - in organic solvents :	Insoluble and immiscible. Soluble in many common solvents.
Viscosity :	Kinematic viscosity at 100°C : about 20.00 mm <sup>2</sup> /s

### **10. STABILITY AND REACTIVITY**

Stability :	The product is stable under normal storage, handling and use temperatures.
Condition to avoid :	Heat (temperatures above flash point), sparks, ignition points, flames, static electricity
Materials to avoid :	Avoid contact with strong oxidizing agents
Hazardous decomposition products :	Incomplete combustion and thermolysis produces potentially toxic gases such as CO, CO2, various hydrocarbons, aldehydes and soot.

### 11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY / LOCAL EFFECTS :

- Inhalation, comments :	Risk is improbable under normal conditions of use. Inhalation of important concentration of vapour or aerosols may cause irritation of the upper respiratory tract.
- Skin contact, comments :	Risk is improbable under normal conditions of use.
- Ingestion, comments :	In case of ingestion of small quantities, no important effect observed. In case of ingestion of larger amounts: abdominal pain, diarrhoea,
CHRONIC TOXICITY OR LONG TERM TO	XICITY :
- Skin contact :	Characteristics skin affections (oil blisters) may develop following prolonged and repeated exposure through contact with stained clothing.
- Sensitization :	No data available to indicate the product contains a sensitising substance.
- Carginogenecity :	During use in engines, contamination of oil with low levels of combustion products occurs. Used motor oils have been shown to cause skin cancer in mice following repeated application and continuous exposure. Brief or intermittent skin contact with used oil is not expected to have serious effects in human if the oil is thoroughly removed by washing with soap and water.



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12. ECOLOGICAL INFORMATIO	N	
Comments about ecotoxicity :	Experimental data on the finished product are not available. No information available for used product. It is considered to present a little danger for aquatic life.	
Mobility :		
- Air :	There is a slow loss by evaporation.	
- Soil :	Given its physical and chemical characteristics, the product generally shows little mobility in the ground.	
- Water :	The product is insoluble; it spreads on the surface of the water.	
13. DISPOSAL INFORMATION		
Waste disposal :	Dispose of in a safe manner, in accordance with local rehulations. If need be, collection by an authorized waste collector and regeneration or incineration in an approved installation.	
Waste class :	13-02-05 (non-chlorinated engine, gear, lubricating oils) The waste classification is dependent on the composition of the product at the time of disposal. The waste classification mentioned here represents only a recommendation. The waster producer is responsible for the correct specification of the waste. The specification of the waster classification should be in arrangement with the authorised waste disposal company.	
Disposal of contaminated packaging :	Proceed in compliance with the prevailing regulations.	
14. TRANSPORT INFORMATION		
Not concerned by the transport regulatory b	below	
Road (ADR) / Rail (RID) :		
Class :	Not restricted for transport	
Transport by barge (ADNR) :		
Marine (IMO-IMDG) :		
Air (ICAO / IATA) :		

Risk phrase(s) :	None
Safety phrase(s) :	None
EU directives :	Hazardous preparations directive 1999/45/EC modified (Directive 2001/60/EC)
Social Security code :	Art. L 461-6, Art. D461-1, appendix A, No. 601. Table of occupational illnesses and diseases No. 36
labor code :	Art. R 241-50, decree of 07.11.1977

### **16. OTHER INFORMATION**

Explanations of R-phrases in section 2 :	R22 Harmful if swallowed	
	R36/38 Irritating to eyes and skin	
	R38 Irritating to skin	
	R41 Risk of serious damage to eye	



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	<ul> <li>R43 May cause sensitisation by skin contact</li> <li>R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment</li> <li>R53 May cause long-term adverse effects in aquatic environment</li> </ul>	

This Safety Data Sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of our knowledge at the date indicated above. It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk. The information given herein in no way dispenses the user from knowing and applying all provisions regulating his or her activity. The user bears sole liability for the precautions required when using the product. The regulatory texts herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive. It is the user's responsibility to enusre that he is subject to no other obligations than those mentioned.