


## Section 1. Identification

<b>GHS product identifier</b>	Optimol Paste White T
<b>Product code</b>	453853-DE03
<b>SDS no.</b>	453853
<b><u>Relevant identified uses of the substance or mixture and uses advised against</u></b>	
<b>Use of the substance/ mixture</b>	Paste For specific application advice see appropriate Technical Data Sheet or consult our company representative.
<b>Manufacturer</b>	
<b>Supplier</b>	Castrol (China) Limited 22nd Floor Devon House 979 King's Road Taikoo Place Hong Kong Tel: (852) 2586 8899 Fax: (852) 2349 0049
<b>EMERGENCY TELEPHONE NUMBER</b>	Carechem: +65 3158 1074 (24 hours)

## Section 2. Hazards identification

<b>GHS Classification</b>	SKIN CORROSION/IRRITATION - Category 3 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 AQUATIC TOXICITY (ACUTE) - Category 2 AQUATIC TOXICITY (CHRONIC) - Category 3
<b><u>GHS label elements</u></b> <b>Hazard pictograms</b>	
<b>Signal word</b>	Danger
<b>Hazard statements</b>	H318 - Causes serious eye damage. H316 - Causes mild skin irritation. H401 - Toxic to aquatic life. H412 - Harmful to aquatic life with long lasting effects.
<b>Precautionary statements</b>	
<b>Prevention</b>	P280 - Wear eye or face protection. P273 - Avoid release to the environment. P264 - Wash hands thoroughly after handling.
<b>Response</b>	P332 + P313 - If skin irritation occurs: Get medical attention. P305 + P351 + P338 + P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.
<b>Storage</b>	Not applicable.
<b>Disposal</b>	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Other hazards which do not result in classification</b>	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

Highly refined mineral oil and additives. Thickening agent.

Ingredient name	%	CAS number
Base oil - unspecified	20 - 50	Varies
kaolin	5 - 10	1332-58-7
Zinc oxide	5 - 10	1314-13-2
Fatty amide derivative.	1 - 5	Proprietary
Silica, amorphous, fumed, cryst.-free	1 - 5	112945-52-5
titanium dioxide	1 - 5	13463-67-7
Alkenyl succinic acid	1 - 5	27859-58-1

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

#### Inhalation

In case of inhalation of decomposition products in a fire, symptoms may be delayed. If inhaled, remove to fresh air. The exposed person may need to be kept under medical surveillance for 48 hours. Get medical attention immediately.

#### Ingestion

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. Chemical burns must be treated promptly by a physician. Get medical attention immediately.

#### Skin contact

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 contaminated clothing thoroughly with water before removing it, or wear gloves. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

#### 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. Chemical burns must be treated promptly by a physician. Get medical attention immediately.

#### Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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

#### Specific treatments

No specific treatment.

#### Notes to physician

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Treatment should in general be symptomatic and directed to relieving any effects.  
Note: High Pressure Applications  
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. Fire-fighting measures

### Extinguishing media

<b>Suitable</b>	In case of fire, use water fog, alcohol resistant foam, dry chemical or carbon dioxide extinguisher or spray.
<b>Not suitable</b>	Do not use water jet.
<b>Specific hazards arising from the chemical</b>	Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life. This material is harmful to aquatic life with long lasting effects.
<b>Hazardous thermal decomposition products</b>	Combustion products may include the following: phosphorus oxides metal oxide/oxides carbon oxides (CO, CO <sub>2</sub> ) (carbon monoxide, carbon dioxide) nitrogen oxides (NO, NO <sub>2</sub> etc.)
<b>Special precautions for fire-fighters</b>	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
<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>	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. Do not breathe vapour or mist. Provide adequate ventilation. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling. Contact emergency personnel.
<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). Water polluting material. May be harmful to the environment if released in large quantities.

### Methods and materials 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. If emergency personnel are unavailable, contain spilt material. Suction or scoop the spill into appropriate disposal or recycling vessels, then cover spill area with oil absorbent. 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). Do not get in eyes or on skin or clothing. Avoid contact of spilt material and runoff with soil and surface waterways. Do not ingest. Empty containers retain product residue and can be hazardous. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Do not reuse container. Do not breathe vapour or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator.
<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. See also Section 8 for additional information on hygiene measures.

## Section 7. Handling and storage

### Conditions for safe storage

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. Store locked up. 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.

## Section 8. Exposure controls/personal protection

### Control parameters

Ingredient name	Exposure limits
Base oil - unspecified	<b>Labour Department, OS&amp;H Branch (Hong Kong).</b> STEL: 10 mg/m <sup>3</sup> 15 minutes. Issued/ Revised: 4/2002 TWA: 5 mg/m <sup>3</sup> 8 hours. Issued/Revised: 4/2002
kaolin	<b>Labour Department, OS&amp;H Branch (Hong Kong).</b> TWA: 2 mg/m <sup>3</sup> 8 hours. Issued/Revised: 4/2002 Form: Respirable dust
Zinc oxide	<b>Labour Department, OS&amp;H Branch (Hong Kong).</b> TWA: 10 mg/m <sup>3</sup> 8 hours. Issued/Revised: 4/2002 Form: Dust STEL: 10 mg/m <sup>3</sup> 15 minutes. Issued/ Revised: 4/2002 Form: Fume TWA: 5 mg/m <sup>3</sup> 8 hours. Issued/Revised: 4/2002 Form: Fume
titanium dioxide	<b>Labour Department, OS&amp;H Branch (Hong Kong).</b> TWA: 10 mg/m <sup>3</sup> 8 hours. Issued/Revised: 4/2002 Form: Inhalable dust TWA: 4 mg/m <sup>3</sup> 8 hours. Issued/Revised: 4/2002 Form: Respirable dust

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

### Appropriate engineering controls

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.

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

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. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

## Section 8. Exposure controls/personal protection

### Eye protection

Chemical splash goggles.

### 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 protection

Use of protective clothing is good industrial practice. 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 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.

### 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

### Appearance

Physical state	Paste
Colour	White.
Odour	Mild
Odour threshold	Not available.
pH	Not available.
Melting point	Not available.
Boiling point	Not available.
Drop Point	Not available.
Flash point	Closed cup: >220°C (>428°F)
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable. Based on - Physical state
Lower and upper explosive (flammable) limits	Not available.
Vapour pressure	<0.01 kPa (<0.075 mm Hg) at 20°C
Vapour density	Not available.
Relative density	Not available.
Density	>1000 kg/m <sup>3</sup> (>1 g/cm <sup>3</sup> ) at 20°C
Solubility	Very slightly soluble in water
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

## 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. Under normal conditions of storage and use, hazardous polymerisation will not occur.
<b>Conditions to avoid</b>	No specific data.
<b>Incompatible materials</b>	Reactive or incompatible with the following materials: oxidising materials.
<b>Hazardous decomposition products</b>	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.

#### **Information on the likely routes of exposure**

Routes of entry anticipated: Dermal, Inhalation.

### Potential acute health effects

#### **Eye contact**

Causes serious eye damage.

#### **Inhalation**

May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

#### **Skin contact**

Causes mild skin irritation. Defatting to the skin.

#### **Ingestion**

May cause burns to mouth, throat and stomach.

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

#### **Eye contact**

Adverse symptoms may include the following:  
pain  
watering  
redness

#### **Inhalation**

No specific data.

#### **Skin contact**

Adverse symptoms may include the following:  
irritation  
redness  
dryness  
cracking

#### **Ingestion**

Adverse symptoms may include the following:  
stomach pains

### 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.

## Section 12. Ecological information

<b>Environmental effects</b>	Water polluting material. May be harmful to the environment if released in large quantities. This material is toxic to aquatic life. This material is harmful to aquatic life with long lasting effects.
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### Persistence and degradability

Not readily biodegradable.

### Bioaccumulative potential

Not available.

### **Mobility**

Non-volatile. Paste. Very slightly soluble 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

	IMDG	IATA
UN number	UN3077	UN3077
UN proper shipping name	Environmentally hazardous substance, solid, n. o.s. (Zinc oxide). Marine pollutant	Environmentally hazardous substance, solid, n. o.s. (Zinc oxide)
Transport hazard class(es)	9  	9  
Packing group	III	III
Environmental hazards	Yes.	Yes.
Additional information	<b>Emergency schedules (EmS)</b> F-A, S-F	-

Special precautions for user Not available.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available.

## Section 15. Regulatory information

### Regulation according to other foreign laws

#### 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 status

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.

## Section 16. Other information

### History

Date of issue/Date of revision 15/08/2013.

Date of previous issue 15/08/2013.

Prepared by Product Stewardship

Indicates information that has changed from previously issued version.

### Notice to reader

Product name Optimol Paste White T

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Page: 7/8

Version 1.01 Date of issue 15/08/2013.

Format GHS - Hong Kong

Language ENGLISH

Build 3.0.2

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## Section 16. Other information

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 us.

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.