



# Safety Data Sheet

## SECTION 1 IDENTIFICATION OF THE HAZARDOUS CHEMICAL AND OF THE SUPPLIER

### Taro 40 XL 40, Taro 40 XL 40X

**Product Use:** Marine Diesel Engine Oil  
**Product Number(s):** 219243, 560062, 560091  
**Company Identification**  
Chevron Malaysia Limited  
Level 3, Menara Milenium  
8, Jalan Damanlela, Bukit Damansara  
Kuala Lumpur 50490  
Malaysia

#### Transportation Emergency Response

Malaysia: 1800-88-3188

#### Health Emergency

Chevron Emergency Information Center: Located in the USA. International collect calls accepted. (800) 231-0623 or (510) 231-0623

#### Product Information

Product Information: 1800-88-3188

## SECTION 2 HAZARDS IDENTIFICATION

**CLASSIFICATION:** Not classified as hazardous according to Malaysian regulatory guidelines.

## SECTION 3 COMPOSITION/ INFORMATION ON INGREDIENTS OF HAZARDOUS CHEMICAL

COMPONENTS	CAS NUMBER	AMOUNT
Highly refined mineral oil (C15 - C50)	Mixture	70 - 99 %weight
Salts of alkyl hydroxybenzoic acids	220795-13-1	0 - < 3 %weight
Benzoic acid, hydroxy-, mono-C20-28-branched alkyl derivs., calcium salts (2:1)	900185-23-1	0 - < 3 %weight
Calcium long chain alkylphenol	Trade secret	0 - < 2.5 %weight
Long chain alkylphenol	Trade secret	0 - < 2.5 %weight
Branched alkylphenol and Calcium branched alkylphenol	74499-35-7 & 132752-19-3	< 0.3 %weight

## SECTION 4 FIRST AID MEASURES

**Revision Number:** 4  
**Revision Date:** October 03, 2018

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**Taro 40 XL 40, Taro 40 XL 40X**  
**SDS :** 26557

### Description of first aid measures

**Eye:** No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water.

**Skin:** No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

**Ingestion:** No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.

**Inhalation:** No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

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

#### IMMEDIATE HEALTH EFFECTS

**Eye:** Not expected to cause prolonged or significant eye irritation.

**Skin:** Contact with the skin is not expected to cause prolonged or significant irritation. Contact with the skin is not expected to cause an allergic skin response. Not expected to be harmful to internal organs if absorbed through the skin.

**Ingestion:** Not expected to be harmful if swallowed.

**Inhalation:** Not expected to be harmful if inhaled. Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.

### Indication of any immediate medical attention and special treatment needed

Not applicable

## SECTION 5 FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA:** Use water fog, foam, dry chemical or carbon dioxide (CO<sub>2</sub>) to extinguish flames.

#### PROTECTION OF FIRE FIGHTERS:

**Fire Fighting Instructions:** This material will burn although it is not easily ignited. See Section 7 for proper handling and storage. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

**Combustion Products:** Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion. Combustion may form oxides of: Calcium .

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment and Emergency Procedures:** Eliminate all sources of ignition in vicinity of spilled material.

**Environmental Precautions:** Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater.

**Methods and Material For Containment and Cleaning Up:** Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil and dispose of in a manner consistent with applicable requirements. Place other contaminated materials in disposable containers and dispose of in a manner consistent with applicable requirements. Report spills to local authorities as appropriate or required.

## SECTION 7 HANDLING AND STORAGE

**General Handling Information:** Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

**Static Hazard:** Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures.

**Container Warnings:** Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### GENERAL CONSIDERATIONS:

Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

### ENGINEERING CONTROLS:

Use in a well-ventilated area.

### PERSONAL PROTECTIVE EQUIPMENT

**Eye/Face Protection:** No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

**Skin Protection:** No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances in the workplace. Suggested materials for protective gloves include: 4H (PE/EVAL), Nitrile Rubber, Silver Shield, Viton.

**Respiratory Protection:** No respiratory protection is normally required. If user operations generate an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators use a particulate cartridge.

Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

### Occupational Exposure Limits:

Component	Agency	TWA	STEL	Ceiling	Notation
Highly refined mineral oil (C15 - C50)	Malaysia	5 mg/m <sup>3</sup>	--	--	--

Consult local authorities for appropriate values.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**Attention:** the data below are typical values and do not constitute a specification.

**Color:** Light to Brown  
**Physical State:** Liquid  
**Odor:** Petroleum odor  
**Odor Threshold:** No data available  
**pH:** Not Applicable  
**Vapor Pressure:** <0.01 mmHg (Estimated) @ 37.8 °C (100 °F)  
**Vapor Density (Air = 1):** >1 (Estimated)  
**Boiling Point:** 315°C (599°F) (Estimated)  
**Boiling Range:** No data available  
**Solubility:** Soluble in hydrocarbons; insoluble in water  
**Freezing Point:** Not Applicable  
**Melting Point:** No data available  
**Density:** 0.8990 - 0.91 kg/l @ 15°C (59°F) (Typical)  
**Viscosity:** 125 mm<sup>2</sup>/s @ 40°C (104°F) Minimum  
**Coefficient of Therm. Expansion / °F:** No data available  
**Evaporation Rate:** No data available  
**Decomposition temperature:** No data available  
**Octanol/Water Partition Coefficient:** No data available

**FLAMMABLE PROPERTIES:**

**Flashpoint:** (Cleveland Open Cup) 220 °C (428 °F) Minimum  
**Autoignition:** No data available  
**Flammability (Explosive) Limits (% by volume in air):** Lower: Not Applicable Upper: Not Applicable

**SECTION 10 STABILITY AND REACTIVITY**

**Reactivity:** May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.  
**Chemical Stability:** This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.  
**Incompatibility With Other Materials:** Not applicable  
**Hazardous Decomposition Products:** None known (None expected)  
**Hazardous Polymerization:** Hazardous polymerization will not occur.

**SECTION 11 TOXICOLOGICAL INFORMATION**

**IMMEDIATE HEALTH EFFECTS**

**Eye Irritation:** The eye irritation hazard is based on evaluation of data for product components.  
**Skin Irritation:** The skin irritation hazard is based on evaluation of data for product components.  
**Skin Sensitization:** The skin sensitization hazard is based on evaluation of data for product components.  
**Acute Dermal Toxicity:** The acute dermal toxicity hazard is based on evaluation of data for product components.  
**Acute Oral Toxicity:** The acute oral toxicity hazard is based on evaluation of data for product components.  
**Acute Inhalation Toxicity:** The acute inhalation toxicity hazard is based on evaluation of data for product components.  
**Acute Toxicity Estimate:** Not Determined

**Germ Cell Mutagenicity:** The hazard evaluation is based on data for components or a similar material.

**Carcinogenicity:** The hazard evaluation is based on data for components or a similar material.

**Reproductive Toxicity:** The hazard evaluation is based on data for components or a similar material.

**Specific Target Organ Toxicity - Single Exposure:** The hazard evaluation is based on data for components or a similar material.

**Specific Target Organ Toxicity - Repeated Exposure:** The hazard evaluation is based on data for components or a similar material.

#### **ADDITIONAL TOXICOLOGY INFORMATION:**

During use in engines, contamination of oil with low levels of cancer-causing 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 motor oil is not expected to have serious effects in humans if the oil is thoroughly removed by washing with soap and water.

This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as; carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B).

These oils have not been classified by the American Conference of Governmental Industrial Hygienists (ACGIH) as: confirmed human carcinogen (A1), suspected human carcinogen (A2), or confirmed animal carcinogen with unknown relevance to humans (A3).

Tetrapropenyl phenol (TPP), also known as dodecyl phenol, was tested in a rat oral gavage one-generation reproductive toxicity study (doses of 0, 5, 25, or 125 mg/kg/day) and a rat dietary two-generation reproductive toxicity study (doses of 0, 1.5, 15, or 75 mg/kg/day). Results from the one-generation study demonstrated reduced ovary weights and changes in male reproductive accessory organs (decreased organ weights, decreased secretions, and decreased epididymal sperm concentrations) at 25 mg/kg/day; 5 mg/kg/day was identified as the No Observed Adverse Effect Level (NOAEL). Results from the two-generation study demonstrated prolonged estrous cyclicity, reduced ovary weights, accelerated sexual maturation, decreased mean live litter size, decreased fertility rates, hypospermia, and reduced weights in male reproductive accessory organs at 75 mg/kg/day; 15 mg/kg/day was identified as the NOAEL.

Evaluation of these two primary studies of TPP (one- & two-generation reproductive toxicity studies), as well as supporting data from additional in-vivo & in-vitro studies of both TPP and substances containing TPP & TPP/calcium salts as an impurity resulted in a classification of TPP as a Category 1B under the criteria of the Globally Harmonized System and Regulation (EC) No 1907/2006 (presumed reproductive hazard to humans).

The studies were also evaluated to identify a valid & reliable specific concentration limit (SCL) for reproductive effects, below which reproductive toxicity would not be expected to occur. An SCL of 1.5 wt% TPP & TPP/calcium salts was derived based on the identified NOAEL from the rat dietary two-generation reproductive toxicity study, and confirmed by supporting studies of substances containing TPP as an impurity.

## **SECTION 12 ECOLOGICAL INFORMATION**

### **ECOTOXICITY**

This material is not expected to be harmful to aquatic organisms.

The product has not been tested. The statement has been derived from the properties of the individual components. This material contains one or more components that have a branched alkylphenol impurity that is highly toxic to aquatic organisms (disclosed in Section 3). The components containing the impurity have been tested and are not toxic to aquatic organisms. Therefore the data in Section 3 for the alkylphenol impurity should not be used to

classify the product for aquatic toxicity.

#### **MOBILITY**

No data available.

#### **PERSISTENCE AND DEGRADABILITY**

This material is not expected to be readily biodegradable. The biodegradability of this material is based on an evaluation of data for the components or a similar material.

The product has not been tested. The statement has been derived from the properties of the individual components.

#### **POTENTIAL TO BIOACCUMULATE**

Bioconcentration Factor: No data available.

Octanol/Water Partition Coefficient: No data available

### **SECTION 13 DISPOSAL INFORMATION**

Use material for its intended purpose or recycle if possible. Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods.

### **SECTION 14 TRANSPORTATION INFORMATION**

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

**UN Shipping Description:** NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER THE UNITED NATIONS MODEL REGULATIONS/RECOMMENDATIONS

**IMO/IMDG Shipping Description:** NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER THE IMDG CODE

**ICAO/IATA Shipping Description:** NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER ICAO

### **SECTION 15 REGULATORY INFORMATION**

#### **REGULATORY LISTS SEARCHED:**

01-1=IARC Group 1  
01-2A=IARC Group 2A  
01-2B=IARC Group 2B

No components of this material were found on the regulatory lists above.

#### **CHEMICAL INVENTORIES:**

All components comply with the following chemical inventory requirements: AICS (Australia), DSL (Canada), ENCS (Japan), IECSC (China), KECI (Korea), PICCS (Philippines), TCSI (Taiwan), TSCA (United States).

One or more components is listed on ELINCS (European Union). All other components are listed or exempted from listing on EINECS.

**SECTION 16 OTHER INFORMATION**

**REVISION STATEMENT:** This revision updates the following sections of this Material Safety Data Sheet:  
3,5,6,9,11,12,14,15

**Revision Date:** October 03, 2018

**ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:**

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	PEL - Permissible Exposure Limit
	CAS - Chemical Abstract Service Number
ACGIH - American Conference of Governmental Industrial Hygienists	IMO/IMDG - International Maritime Dangerous Goods Code
API - American Petroleum Institute	MSDS - Material Safety Data Sheet
CVX - Chevron	NFPA - National Fire Protection Association (USA)
DOT - Department of Transportation (USA)	NTP - National Toxicology Program (USA)
IARC - International Agency for Research on Cancer	OSHA - Occupational Safety and Health Administration

Prepared according to the Malaysia Industry Code of Practice on Chemicals Classification and Hazard Communication 201 by the Chevron Energy Technology Company, 6001 Bollinger Canyon Road, San Ramon, California 94583.

**The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.**