# **Safety Data Sheet**

According to Occupational Safety and Health(Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Malaysia Regulations 2013



# TERGITOL™ 26-L-9 Surfactant

Version 1.2 Release Date: 22.12.2021

#### SECTION 1: Identification of the hazardous chemical and of the supplier

**Product identifier** 

TERGITOL™ 26-L-9 Surfactant Product name

Recommended use of the chemical and restrictions on use

Recommended use Detergent, emulsifying agent, industrial and household cleaner

Restrictions on use No restriction of use

Manufacturer or supplier's details

Headquarters

Company PETRONAS Chemicals Group Berhad Tower 1, PETRONAS Twin Towers, Address

Kuala Lumpur City Centre, 50088 Kuala Lumpur

Malaysia

**Plant Site** 

Company PETRONAS Chemicals Derivatives Sdn Bhd

Address Administration Complex,

Kerteh Industrial Area,

KM 106 Jalan Kuala Terengganu - Kuantan,

24300 Kerteh, Kemaman, Terengganu, Malaysia

Emergency telephone (+609) 830 7555 999 (Bomba) number

National Poison Centre:

+604-6570099 (Mon-Fri: 8.10 am - 5.10 pm)

+6012-4309499 (Mon-Fri: 5.10 pm - 10.10 pm) &(Sat, Sun &

Public holiday: 8.10 am - 5.10 pm)

#### **SECTION 2: Hazards identification**

## Classification of the hazardous chemical

Hazardous to the aquatic

environment- chronic hazard

Category 3

Label elements

Hazard pictograms : None

Signal word : None

Hazard statements H412 Harmful to aquatic life with long lasting effects.

Precautionary statements **Prevention:** 

P273 Avoid release to the environment.

Disposal:

P501 Dispose of contents/ container to an approved waste

disposal plant.

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

No information available.

™ TRADEMARK OF THE DOW CHEMICAL COMPANY ("DOW") OR AN AFFILIATED COMPANY OF DOW



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## SECTION 3: Composition and information of the ingredients of the hazardous chemical

Substance / Mixture : UVCB

Chemical nature : Primary alcohol ethoxylate

Components

Chemical name	CAS-No.	Concentration (%)
Alcohols, C12-14, ethoxylated	68439-50-9	>= 90 -<= 100

#### **SECTION 4: First aid measures**

If inhaled : If unconscious, place in recovery position and seek medical

advice.

If symptoms persist, call a medical doctor.

In case of eye contact : Flush eyes with water as a precaution.

Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.

Do NOT give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a medical doctor.

General advice

Do not leave the victim unattended.

Most important symptoms

and effects, both acute and

delayed

No information available.

#### **SECTION 5: Firefighting measures**

## Extinguishing media

Suitable extinguishing media : Water fog or fine spray. Dry chemical fire extinguishers.

Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will

be less effective.

Unsuitable extinguishing

media

High volume water jet

# Physicochemical hazards arising from the chemical

## Special protective equipment and precautions for fire-fighters

Special protective equipment :

for firefighters

Wear positive-pressure self-contained breathing apparatus (SBCA) and protective fire fighting clothing (includes fire fighting helmet, coat, pants, boots, and gloves). If protective

equipment is not available or not used, fight fire from a

protected location or safe distance.

Wear self-contained breathing apparatus for firefighting if



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necessary.

Specific extinguishing

methods

Standard procedure for chemical fires.

Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

#### **SECTION 6: Accidental release measures**

Environmental precautions Methods and materials for containment and cleaning up Prevent further leakage or spillage if safe to do so.

Neutralise with acid.

Keep in suitable, closed containers for disposal. Wipe up with absorbent material (e.g. cloth, fleece).

# **SECTION 7: Handling and storage**

#### Handling

## Precautions for safe handling

fire and explosion Advice on safe handling

Advice on protection against : Normal measures for preventive fire protection.

Do not breathe vapours/dust.

For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the

application area.

To avoid spills during handling keep bottle on a metal tray. Dispose of rinse water in accordance with local and national

regulations.

Do not get in eyes, on skin, on clothing.

Wash thoroughly after handling.

Do not swallow.

For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the

application area.

Dispose of rinse water in accordance with local and national

regulations.

#### **Storage**

## Conditions for safe storage, including any incompatibilities

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated

place.

Electrical installations / working materials must comply with

the technological safety standards.

Further information on

storage stability

No decomposition if stored and applied as directed.

# **SECTION 8: Exposure controls and personal protection**

#### **Control parameters**

Contains no substances with occupational exposure limit values.



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#### Individual protection measures, such as personal protective equipment

Eye/face protection Eve wash bottle with pure water.

Tightly fitting safety goggles

Impervious clothingChoose body protection according to the Skin protection

amount and concentration of the dangerous substance at the

work place.

Hand protection

Remarks The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Wash hands before breaks and at the end of workday. Hygiene measures

## **SECTION 9: Physical and chemical properties**

**Appearance** Liquid

Colour Slightly Yellow

Odour mild

Odour Threshold No data available

рΗ 11.4

> 20.0 °C Melting point/freezing point

Initial boiling point and boiling : 150 °C

range

Flash point 200.0 °C Method: ASTM D 93

Evaporation rate No data available Upper explosion limit / Upper Not applicable

flammability limit

Lower explosion limit / Lower

flammability limit

Not applicable

Vapour pressure < 0.013 hPa (20 °C) Relative vapour density : No data available Relative density 0.9892 (55 °C) Density 0.9750 g/cm3 (55 °C)

Solubility(ies)

Water solubility soluble

Partition coefficient: n-No data available

octanol/water

Auto-ignition temperature

Viscosity

500 °C

Viscosity, dynamic 48.13 mPa.s (20 °C)Method: ASTM D 445 Viscosity, kinematic 33.78 mm2/s (40 °C)Method: ASTM D 445

## **SECTION 10: Stability and reactivity**

Reactivity Hazardous polymerisation does not occur.

Chemical stability Stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Incompatible materials Strong oxidizing agents

Hazardous decomposition Fumes, smoke, carbon monoxide

Decomposition products depend upon temperature, air supply products

and the presence of other materials. Fumes, smoke, carbon monoxide



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## **SECTION 11: Toxicological information**

## **Acute toxicity**

## **Components:**

Alcohols, C12-14, ethoxylated:

Acute oral toxicity : LD50 (Rat, male and female): > 2,000 mg/kg Acute inhalation toxicity : LC50 (Rat, male and female): > 1,600 mg/m3

Exposure time: 4 h
Test atmosphere: aerosol

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg

Skin corrosion/irritation

Components:

Alcohols, C12-14, ethoxylated:

Species : Rabbit

Result : No skin irritation

Serious eye damage/eye irritation

**Components:** 

Alcohols, C12-14, ethoxylated:

Species : Rabbit

Result : No eye irritation

Respiratory or skin sensitisation

Components:

Alcohols, C12-14, ethoxylated:

Exposure routes : Skin contact
Species : Guinea pig
Result : Not sensitising
Exposure routes : Inhalation

Remarks : No data available

Germ cell mutagenicity

**Components:** 

Alcohols, C12-14, ethoxylated:

Germ cell mutagenicity - : Not mutagenic in vivo and in vitro

Assessment

Carcinogenicity

**Components:** 

Alcohols, C12-14, ethoxylated:

Carcinogenicity - : No data available

Assessment

Reproductive toxicity

**Components:** 

Alcohols, C12-14, ethoxylated:

Reproductive toxicity - : No toxicity to reproduction

Assessment



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STOT - single exposure

**Components:** 

Alcohols, C12-14, ethoxylated:

No data available Remarks

STOT - repeated exposure

**Components:** 

Alcohols, C12-14, ethoxylated:

NOAEL (Rat,13 week oral) >= 500 mg/kg bw/d Remarks

**Aspiration toxicity** 

**Components:** 

Alcohols, C12-14, ethoxylated:

Statement on Aspiration Tox. : No data available

## **SECTION 12: Ecological information**

## **Ecotoxicity**

**Product:** 

aquatic invertebrates

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 1.1 mg/l

Exposure time: 48 h

Test Type: Immobilization Method: OECD Test Guideline 202

**Components:** 

Alcohols, C12-14, ethoxylated:

Toxicity to fish Remarks: No data available

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 1.1 mg/l

aquatic invertebrates

Exposure time: 48 h

Toxicity to algae Remarks: No data available

toxicity)

NOEC (Pimephales promelas (fathead minnow)): 0.11 - 0.28

mg/l

Toxicity to daphnia and other :

Exposure time: 30 d

aquatic invertebrates

Toxicity to fish (Chronic

NOEC (Daphnia magna (Water flea)): 0.77 mg/l

Exposure time: 21 d

(Chronic toxicity) Toxicity to microorganisms

EC50 (Pseudomonas putida): > 10 g/l

Exposure time: 16.9 h

Persistence and degradability

**Product:** 

Biodegradability Result: Readily biodegradable.

Method: OECD Test Guideline 301D

**Components:** 

Alcohols, C12-14, ethoxylated:

Result: Readily biodegradable. Biodegradability



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#### **Bioaccumulative potential**

**Components:** 

Alcohols, C12-14, ethoxylated:

Bioaccumulation : Bioconcentration factor (BCF): 237

Mobility in soil

**Product:** 

Mobility : Medium: Soil

Remarks: No data available

**Components:** 

Alcohols, C12-14, ethoxylated:

Mobility : Medium: Soil

Remarks: No data available

Other adverse effects

**Product:** 

Additional ecological

information

: Harmful to aquatic life with long lasting effects.

**Components:** 

Alcohols, C12-14, ethoxylated:

Additional ecological

information

: No data available

## **SECTION 13: Disposal information**

**Disposal methods** 

Waste from residues : Do not dispose of waste into sewer.

Do not contaminate ponds, waterways or ditches with

chemical or used container.

Do not dispose of waste into sewer.

Do not contaminate ponds, waterways or ditches with

chemical or used container.

Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.

Dispose of as unused product. Do not re-use empty containers.

## **SECTION 14: Transport information**

## International Regulations

**UNRTDG** 

Not regulated as a dangerous good

**IATA-DGR** 

Not regulated as a dangerous good



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#### **IMDG-Code**

Not regulated as a dangerous good

#### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

: Y Pollution category Ship type 2

#### **SECTION 15: Regulatory information**

## Safety, health, and environmental regulations specific for the hazardous chemical

Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013.

Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations 2000.

## The components of this product are reported in the following inventories:

**TCSI** On the inventory, or in compliance with the inventory. **TSCA** All substances listed as active on the TSCA inventory **AICS** On the inventory, or in compliance with the inventory. DSL All components of this product are on the Canadian DSL

**ENCS** Not in compliance with the inventory **ISHL** Not in compliance with the inventory

KECI On the inventory, or in compliance with the inventory. **PICCS** On the inventory, or in compliance with the inventory. On the inventory, or in compliance with the inventory. **IECSC** 

**NZIoC** Not in compliance with the inventory

## **SECTION 16: Other information**

#### **Further information**

Sources of key data used to : ECHA - European Chemicals Agency compile the Safety Data

Sheet

Date format dd.mm.yyyy

#### Full text of other abbreviations

(Q)SAR (Quantitative) Structure Activity Relationship

**ACGIH** American Conference of Governmental Industrial Hygienists

**AICS** Australian Inventory of Chemical Substances **ANTT** National Agency for Transport by Land of Brazil American Society for the Testing of Materials ASTM

bw Body weight Ceiling C

**CCHC** Chemicals Classification and Hazard Communication

Ceiling CEIL

Chronic Toxicity Value ChV

Carcinogen, Mutagen or Reproductive Toxicant CMR

Controlled Products Regulations CPR



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DIN - Standard of the German Institute for Standardisation

DSL - Domestic Substances List (Canada)

ECx - Concentration associated with x% response ELx - Loading rate associated with x% response

EmS - Emergency Schedule

ENCS - Existing and New Chemical Substances (Japan)

ErCx - Concentration associated with x% growth rate response

ERG - Emergency Response Guide

GHS - Globally Harmonized System of Classification and Labelling of Chemicals

GLP - Good Laboratory Practice

IARC - International Agency for Research on Cancer

IATA - International Air Transport Association

International Code for the Construction and Equipment of Ships carrying

Dangerous Chemicals in Bulk

IC50 - Half maximal inhibitory concentration ICAO - International Civil Aviation Organization

ICOP - Industry Code of Practice on Chemicals Classification and Hazard

Communication

IECSC - Inventory of Existing Chemical Substances in China

IMDG - International Maritime Dangerous Goods
 IMO - International Maritime Organization
 ISHL - Industrial Safety and Health Law (Japan)
 ISO - International Organisation for Standardization

KECI - Korea Existing Chemicals Inventory

LC50 - Lethal Concentration to 50 % of a test population

LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)MARPOL - International Convention for the Prevention of Pollution from Ships

MY PEL - Malaysian Permissible Exposure Limit

n.o.s. - Not Otherwise Specified

Nch - Chilean Norm

NITE - National Institute of Technology and Evaluation NO(A)EC - No Observed (Adverse) Effect Concentration

NO(A)EL - No Observed (Adverse) Effect Level NOELR - No Observable Effect Loading Rate

NOM - Official Mexican Norm

NTP - National Toxicology Program

NZIoC - New Zealand Inventory of Chemicals

OCSPP - Office of Chemical Safety and Pollution Prevention

OECD - Organization for Economic Co-operation and Development

PBT - Persistent, Bioaccumulative and Toxic

PICCS - Philippines Inventory of Chemicals and Chemical Substances

REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council

concerning the Registration, Evaluation, Authorisation and Restriction of

Chemicals

SADT - Self-Accelerating Decomposition Temperature

SDS - Safety Data Sheet

STEL - Short Term Exposure Limit

TCSI - Taiwan Chemical Substance Inventory
TDG - Transportation of Dangerous Goods

TSCA - Toxic Substances Control Act (United States)

TWA - Time Weighted Average

UN - United Nations

UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods
UVCB - Unknown or Variable Composition, Complex Reaction Products and

**Biological Materials** 



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vPvB - Very Persistent and Very Bioaccumulative

WHMIS - Workplace Hazardous Materials Information System Lux - Loading rate associated with x% lethality effect

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