# SAFETY DATA SHEET

## SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

Product name : TWIN 4T 20W50
Product code : 74582northamerica

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

4-stroke engine lubricant

### 1.3. Details of the supplier of the safety data sheet

Registered company name : MOTUL.
Address : 119 BOULEVARD FELIX FAURE.93300.AUBERVILLIERS CEDEX.FRANCE.
Telephone : +33 (0)1.48.11.70.00. Fax : +33 (0)1.48.33.28.79.
motul_hse@motul.fr

### 1.4. Emergency telephone number : +44 (0) 1235 239 670.

Association/Organisation : CARECHEM 24/7 NCEC.

### Other emergency numbers

UNITED STATES: 001 866 928 0789 / CANADA: 001 800 579 7421 / MEXICO : +52 55 5004 8763 / MIDDLE EAST - AFRICA : +44 1235 239671
BRAZIL : +55 11 3197 5891 / COLOMBIA : +57 601 508 7337 / ARGENTINA : +54 11 5984 3690 / CHILE : +562 2582 9336
Ireland : +353 1 8092566
24 hours a day, 7 days a week

## SECTION 2 : HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

**HCS compliant.**

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.
This mixture does not present a health hazard with the exception of possible occupational exposure thresholds (see paragraphs 3 and 8).

### 2.2. Label elements

**HCS compliant.**

No labelling requirements for this mixture.

### 2.3. Other hazards

## SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixtures

**Composition :**

| Identification | Classification HCS | Nota | % |
|---|---|---|---|
| CAS: 64742-54-7<br>EC: 265-157-1<br>REACH: 01-2119484627-25<br><br>DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC | | | 50 <= x % < 100 |
| CAS: MIXTURE<br>EC: MIXTURE<br><br>MINERAL OIL | GHS08<br>Dgr<br>Asp. Tox. 1, H304 | | 2.5 <= x % < 10 |
| CAS: 84605-29-8<br>EC: 283-392-8<br>REACH: 01-2119493626-26<br><br>PHOSPHORODITHIOIC ACID, MIXED | GHS07, GHS05<br>Dgr<br>Skin Irrit. 2, H315<br>Eye Dam. 1, H318 | | 0 <= x % < 2.5 |

| | | | |
|---|---|---|---|
| O,O-BIS(1,3-DIMETHYLBUTYL AND ISO-PR) ESTERS, ZINC SALTS | | | |
| CAS: 64742-54-7<br>EC: 265-157-1<br>REACH: 01-2119484627-25<br><br>DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC | GHS08<br>Dgr<br>Asp. Tox. 1, H304 | | 0 <= x % < 2.5 |
| CAS: 72623-87-1<br>EC: 276-738-4<br>REACH: 01-2119474889-13<br><br>LUBRICATING OILS (PETROLEUM), C20-50, HYDROTREATED NEUTRAL OIL-BASED | GHS08<br>Dgr<br>Asp. Tox. 1, H304 | | 0 <= x % < 2.5 |
| CAS: 72623-86-0<br>EC: 276-737-9<br>REACH: 01-2119474878-16<br><br>LUBRICATING OILS (PETROLEUM), C20-50, HYDROTREATED NEUTRAL OIL-BASED | GHS08<br>Dgr<br>Asp. Tox. 1, H304 | | 0 <= x % < 2.5 |

**Information on ingredients :**

(Full text of H-phrases: see section 16)

## SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.
NEVER induce swallowing by an unconscious person.

### 4.1. Description of first aid measures

**In the event of exposure by inhalation :**

Remove the victim to fresh air. If the symptoms persist, call a physician.

**In the event of splashes or contact with eyes :**

Wash immediately and abundantly with water, including under the eyelids.

**In the event of splashes or contact with skin :**

Immediately remove all soiled clothing.
Wash immediately and abundantly with soap and water.

**In the event of swallowing :**

Seek medical attention, showing the label.

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

No data available.

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

No data available.

## SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

### 5.1. Extinguishing media

**Suitable methods of extinction**

Dry agent, foam, carbon dioxide.

**Unsuitable methods of extinction**

High volume water jet

### 5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.
Do not breathe in smoke.
In the event of a fire, the following may be formed :
- carbon monoxide (CO)
- carbon dioxide (CO2)

### 5.3. Advice for firefighters

No data available.

## SECTION 6 : ACCIDENTAL RELEASE MEASURES

**6.1. Personal precautions, protective equipment and emergency procedures**

Consult the safety measures listed under headings 7 and 8.

Spilled product may make surfaces slippery.

**For first aid worker**

First aid workers will be equipped with suitable personal protective equipment (See section 8).

**6.2. Environmental precautions**

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

**6.3. Methods and material for containment and cleaning up**

Clean preferably with a detergent, do not use solvents.

**6.4. Reference to other sections**

No data available.

## SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

**7.1. Precautions for safe handling**

Always wash hands after handling.

Do not swallow

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

**Fire prevention :**

Prevent access by unauthorised personnel.

Take precautionary measures against static discharges by bonding and grounding equipment.

No smoking.

**Recommended equipment and procedures :**

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Ensure good ventilation at the workplace

**Prohibited equipment and procedures :**

No smoking, eating or drinking in areas where the mixture is used.

Do not breathe fumes, vapour, spray.

**7.2. Conditions for safe storage, including any incompatibilities**

Store between 5°C and 40°C in a dry, well ventilated place.

Only use hydrocarbon-resistant containers, joints and pipes.

**Storage**

Keep out of reach of children.

**Packaging**

Always keep in packaging made of an identical material to the original.

**7.3. Specific end use(s)**

No data available.

## SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1. Control parameters**

No data available.

**8.2. Exposure controls**

**Appropriate engineering controls**

Ensure adequate ventilation, if possible with extractor fans at work posts and appropriate general extraction.

Personnel shall wear regularly laundered overalls.

**Personal protection measures, such as personal protective equipment**

Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

**- Eye / face protection**

Avoid contact with eyes.
Use eye protectors designed to protect against liquid splashes
Before handling, wear safety goggles in accordance with standard EN166.

**- Hand protection**

Wear suitable protective gloves in the event of prolonged or repeated skin contact.
Type of gloves recommended :

| | |
|---|---|
| Glove thickness: | 0.38 mm |
| Break-through time: | > 480 mn |

**- Body protection**

Work clothing worn by personnel shall be laundered regularly.
After contact with the product, all parts of the body that have been soiled must be washed.

**- Respiratory protection**

Breathing apparatus only when aerosol or spray are formed.

## SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

No data available.

**Physical state**

| | |
|---|---|
| Physical state : | Fluid liquid. |

**Colour**

Unspecified

**Odour**

| | |
|---|---|
| Odour threshold : | Not stated. |

**Melting point**

| | |
|---|---|
| Melting point/melting range : | Not relevant. |

**Freezing point**

| | |
|---|---|
| Freezing point / Freezing range : | Not stated. |

**Boiling point or initial boiling point and boiling range**

| | |
|---|---|
| Boiling point/boiling range : | Not relevant. |

**Flammability**

| | |
|---|---|
| Flammability (solid, gas) : | Not stated. |

**Lower and upper explosion limit**

| | |
|---|---|
| Explosive properties, lower explosivity limit (%) : | Not stated. |
| Explosive properties, upper explosivity limit (%) : | Not stated. |

**Flash point**

| | |
|---|---|
| Flash Point Interval : | FP > 100°C (212 °F) |

**Auto-ignition temperature**

| | |
|---|---|
| Self-ignition temperature : | Not relevant. |

**Decomposition temperature**

| | |
|---|---|
| Decomposition point/decomposition range : | Not relevant. |

**pH**

| | |
|---|---|
| pH (aqueous solution) : | Not stated. |
| pH : | Not relevant. |

**Kinematic viscosity**

| | |
|---|---|
| Viscosity : | 139.4 mm2/s à 40°C |

**Solubility**

| | |
|---|---|
| Water solubility : | Insoluble. |
| Fat solubility : | Not stated. |

**Partition coefficient n-octanol/water (log value)**

| | |
|---|---|
| Partition coefficient: n-octanol/water : | Not stated. |

**Vapour pressure**

| | |
|---|---|
| Vapour pressure (50°C) : | Not relevant. |

**Density and/or relative density**

| | |
|---|---|
| Density : | < 1 |

**Relative vapour density**

| | |
|---|---|
| Vapour density : | Not stated. |

**9.2. Other information**

No data available.

**9.2.1. Information with regard to physical hazard classes**

No data available.

**9.2.2. Other safety characteristics**

No data available.

## SECTION 10 : STABILITY AND REACTIVITY

**10.1. Reactivity**

No data available.

**10.2. Chemical stability**

This mixture is stable under the recommended handling and storage conditions in section 7.

**10.3. Possibility of hazardous reactions**

No data available.

**10.4. Conditions to avoid**

Keep away from heat and from sources of ignition
Take precautionary measures against static discharges.

**10.5. Incompatible materials**

Strong oxidants
Acids

**10.6. Hazardous decomposition products**

The thermal decomposition may release/form :
- carbon monoxide (CO)
- carbon dioxide (CO2)

## SECTION 11 : TOXICOLOGICAL INFORMATION

**11.1. Information on toxicological effects**

No data available.

**11.1.1. Substances**

No toxicological data available for the substances.

**11.1.2. Mixture**

**Skin corrosion/skin irritation :**

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non allergic contact dermatitis and absorption through the skin.

**Serious damage to eyes/eye irritation :**

Mild eye irritation

**Aspiration hazard :**

"Inhalation of vapours may cause irritation of the respiratory system in very susceptible persons."
May cause lung damage if swallowed

**11.2. Information on other hazards**

## SECTION 12 : ECOLOGICAL INFORMATION

The product must not be allowed to run into drains or waterways.

**12.1. Toxicity**

**12.1.1. Substances**

PHOSPHORODITHIOIC ACID, MIXED O,O-BIS(1,3-DIMETHYLBUTYL AND ISO-PR) ESTERS, ZINC SALTS (CAS: 84605-29-8)

| | |
|---|---|
| Fish toxicity : | LC50 = 4.5 mg/l<br>Species : Trutta iridea<br>Duration of exposure : 96 h<br><br>NOEC = 1.8 mg/l<br>Species : Trutta iridea<br>Duration of exposure : 96 h |
| Crustacean toxicity : | EC50 = 23 mg/l |

Duration of exposure : 48 h

NOEC = 10 mg/l
Duration of exposure : 48 h

Aquatic plant toxicity : ECr50 = 21 mg/l
Duration of exposure : 72 h

NOEC = 10 mg/l
Duration of exposure : 72 h

BIS(NONYLPHENYL)AMINE (CAS: 36878-20-3)
Fish toxicity : LC50 > 100 mg/l
Duration of exposure : 96 h

Crustacean toxicity : EC50 > 100 mg/l
Duration of exposure : 48 h

Aquatic plant toxicity : ECr50 = 600 mg/l
Duration of exposure : 72 h

MINERAL OIL (CAS: MIXTURE)
Fish toxicity : LC50 > 100 mg/l
Species : Pimephales promelas
Duration of exposure : 96 h

Crustacean toxicity : EC50 > 10000 mg/l
Duration of exposure : 48 h

Aquatic plant toxicity : ECr50 > 100 mg/l
Duration of exposure : 72 h

**12.1.2. Mixtures**

No aquatic toxicity data available for the substances.

**12.2. Persistence and degradability**

**12.2.1. Substances**

PHOSPHORODITHIOIC ACID, MIXED O,O-BIS(1,3-DIMETHYLBUTYL AND ISO-PR) ESTERS, ZINC SALTS (CAS: 84605-29-8)
Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

BIS(NONYLPHENYL)AMINE (CAS: 36878-20-3)
Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

MINERAL OIL (CAS: MIXTURE)
Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

**12.3. Bioaccumulative potential**

**12.3.1. Substances**

BIS(NONYLPHENYL)AMINE (CAS: 36878-20-3)
Bioaccumulation : BCF = 1584.89

PHOSPHORODITHIOIC ACID, MIXED O,O-BIS(1,3-DIMETHYLBUTYL AND ISO-PR) ESTERS, ZINC SALTS (CAS: 84605-29-8)
Octanol/water partition coefficient : log Koe = 0.56

**12.4. Mobility in soil**

Not very mobile in soil.
The product is insoluble in water and will spread on the surface

**12.5. Results of PBT and vPvB assessment**

No data available.

**12.6. Endocrine disrupting properties**

No data available.

**12.7. Other adverse effects**

Do not dispose of the product in the natural environment, effluents or surface waters.

## SECTION 13 : DISPOSAL CONSIDERATIONS

The appropriate waste management of the mixture and/or its container must be determined in accordance with local regulations.

**13.1. Waste treatment methods**

Do not pour into drains or waterways.

**Waste :**

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

**Soiled packaging :**

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

## SECTION 14 : TRANSPORT INFORMATION

Exempt from transport classification and labelling.

**14.1. UN number**

-

**14.2. UN proper shipping name**

-

**14.3. Transport hazard class(es)**

-

**14.4. Packing group**

-

**14.5. Environmental hazards**

-

**14.6. Special precautions for user**

-

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

-

## SECTION 15 : REGULATORY INFORMATION

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

The following regulations have been used:

- OSHA Hazard Communication Standard 29 CFR 1910.1200

**Container information:**

No data available.

**Particular provisions :**

No data available.

**- Clean Water Act : Toxic Pollutants (CWA 307A)**

| CAS | Name |
|---|---|
| 91-20-3 | NAPHTHALENE |

**- Clean Water Act : Hazardous Substances (CWA 311)**

Unlisted.

**- Clean Water Act : Hazardous Substances (CWA 304b)**

| CAS | Name |
|---|---|
| 91-20-3 | NAPHTHALENE |

**- Clean Water Act : Priority Pollutants (CWA Priority)**

| CAS | Name |
|---|---|
| 91-20-3 | NAPHTHALENE |

**- Clean Air Act : Hazardous Air Pollutants (CAA 112(b) HAP (188))**

| CAS | Name |
|---|---|
| 91-20-3 | NAPHTHALENE |

**- Clean Air Act : Organic Hazardous Air Pollutants National Emission Standards (CAA 112(b) HON (387))**

| CAS | Name |
|---|---|
| 91-20-3 | NAPHTHALENE |
| 121158-58-5 | PHENOL, DODECYL-, BRANCHED |

**- Clean Air Act : Protection of Stratospheric Ozone (CAA 602)**

Unlisted.

**- SARA 110**

| CAS | Name |
|---|---|
| 91-20-3 | NAPHTHALENE |
| 91-20-3 | NAPHTHALENE |

**- SARA 302/304**

Unlisted.

**- SARA 313**

| CAS | Name |
|---|---|
| 91-20-3 | NAPHTHALENE |

**- California proposition 65 : Chemicals known to the state to cause cancer or reproductive toxicity**

| CAS | Name |
|---|---|
| 91-20-3 | NAPHTHALENE (cancer) |

**- Massachusetts : Right to Know**

| CAS | Name |
|---|---|
| 91-20-3 | NAPHTHALENE |

**- New Jersey : Right to Know**

| CAS | Name |
|---|---|
| 91-20-3 | NAPHTHALENE |

**- Pennsylvania : Hazardous Substance**

| CAS | Name |
|---|---|
| 91-20-3 | NAPHTHALENE |

**- Rhode Island : Hazardous substance list**

| CAS | Name |
|---|---|
| 91-20-3 | NAPHTHALENE |

**- TSCA (Toxic Substances Control Act) - USA**

| CAS | Name |
|---|---|
| 92257-31-3 | 2-NAPHTHALENOL, 1-[[4-(PHENYLAZO)PHENYL]AZO]-, AR-HEPTYL AR',AR''-ME DERIVS. |
| 91-20-3 | NAPHTHALENE |
| 84605-29-8 | PHOSPHORODITHIOIC ACID, MIXED O,O-BIS(1,3-DIMETHYLBUTYL AND ISO-PR) ESTERS, ZINC SALTS |
| 84605-29-8 | PHOSPHORODITHIOIC ACID, MIXED O,O-BIS(1,3-DIMETHYLBUTYL AND ISO-PR) ESTERS, ZINC SALTS |
| 72623-87-1 | LUBRICATING OILS (PETROLEUM), C20-50, HYDROTREATED NEUTRAL OIL-BASED |
| 72623-86-0 | LUBRICATING OILS (PETROLEUM), C20-50, HYDROTREATED NEUTRAL OIL-BASED |
| 64742-54-7 | DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC |
| 64742-54-7 | DISTILLATES (PETROLEUM), HYDROTREATED HEAVY PARAFFINIC |
| 64742-53-6 | DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC |
| 36878-20-3 | BIS(NONYLPHENYL)AMINE |

**15.2. Chemical safety assessment**

Product is not classified health and environmental hazard. Exposure scenarios are not required.

## SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.
The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.
It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.
The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

**Wording of the phrases mentioned in section 3 :**

| | |
|---|---|
| H304 | May be fatal if swallowed and enters airways. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |

**Abbreviations and acronyms :**

LC50 : The concentration of a test substance resulting in 50% lethality in a given period.
EC50 : The effective concentration of substance that causes 50% of the maximum response.
ECr50 : The effective concentration of substance that causes 50% reduction in growth rate.
NOEC : The concentration with no observed effect.
REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.
STEL : Short-term exposure limit
TWA : Time Weighted Averages
TMP : French Occupational Illness table
TLV : Threshold Limit Value (exposure)
AEV : Average Exposure Value.
ADR : European agreement concerning the international carriage of dangerous goods by Road.
IMDG : International Maritime Dangerous Goods.
IATA : International Air Transport Association.
ICAO : International Civil Aviation Organisation
RID : Regulations concerning the International carriage of Dangerous goods by rail.
PBT: Persistent, bioaccumulable and toxic.
vPvB : Very persistent, very bioaccumulable.
HCS : Hazard Communication standard (OSHA).