SAFETY DATA SHEET
2T Universal Two-Stroke Oil

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Product name 2T Universal Two-Stroke Oil
Product number 7750
Internal identification GHS21677
REACH registration number n/a Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against
Identified uses Lubricant for Two Stroke Engines
Uses advised against Non specified unless otherwise stated within this MSDS

1.3. Details of the supplier of the safety data sheet
Supplier Morris Lubricants
Castle Foregate
Shrewsbury
SY1 2EL

08.45 - 17.00 GMT
T: (+44)(0)1743 232200
F: (+44)(0)1743 353584
sds@morris-lubricants.co.uk

1.4. Emergency telephone number
Emergency telephone +44 (0)1743 232200 (08.45 - 17.00 hrs GMT)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification
Physical hazards Not Classified
Health hazards Not Classified
Environmental hazards Not Classified

Classification (67/548/EEC or 1999/45/EC) Not Classified

2.2. Label elements
Hazard statements NC Not Classified
Supplemental label information EUH210 Safety data sheet available on request.

2.3. Other hazards
2T Universal Two-Stroke Oil

This product does not contain any substances classified as PBT or vPvB.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

<table>
<thead>
<tr>
<th>Base oil - Unspecified - Distillates (Petroleum), hydrotreated Heavy Paraffinic</th>
<th>60-100%</th>
</tr>
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<tbody>
<tr>
<td><strong>CAS number:</strong> 64742-54-7</td>
<td><strong>EC number:</strong> 265-157-1</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Distillates (petroleum) solvent-dewaxed heavy paraffinic</th>
<th>30-60%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CAS number:</strong> 64742-65-0</td>
<td><strong>EC number:</strong> 265-169-7</td>
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#### Classification

<table>
<thead>
<tr>
<th>Base oil - Unspecified - Distillates (Petroleum), hydrotreated Heavy Paraffinic</th>
<th>Not Classified</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Distillates (petroleum) solvent-dewaxed heavy paraffinic</th>
<th>Classification (67/548/EEC or 1999/45/EC)</th>
</tr>
</thead>
</table>

A petroleum product. DMSO extract < 3 % weight ( IP 346 )

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

#### Composition comments

If REACH registration numbers do not appear the substance is either exempt from registration, does not meet the minimum volume threshold for registration, the registration date has not yet come due or this information is proprietary.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

**General information**

Get medical attention if any discomfort continues.

**Inhalation**

If spray/mist has been inhaled, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.

**Ingestion**

Get medical attention if any discomfort continues. Do not induce vomiting.

**Skin contact**

Remove contaminated clothing immediately and wash skin with soap and water.

**Eye contact**

Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention promptly if symptoms occur after washing.

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

**General information**

If aspiration into the lungs is suspected, eg when vomitting, admit to hospital immediately.

**Inhalation**

Upper respiratory irritation.

**Ingestion**

May cause discomfort if swallowed. The product contains mineral oil, which if aspirated into the lungs through vomitting after ingestion, may result in chemical pneumonia.

**Skin contact**

Prolonged contact may cause redness, irritation and dry skin.

**Eye contact**

Irritation of eyes and mucous membranes.

#### 4.3. Indication of any immediate medical attention and special treatment needed
2T Universal Two-Stroke Oil

Notes for the doctor
Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media
Extinguish with foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture
Specific hazards
Heat from fire could result in drums bursting

Hazardous combustion products
Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m3. Oxides of carbon. Oxides of nitrogen. Fire may also create other unidentified organic gases some of which may be toxic.

5.3. Advice for firefighters
Protective actions during firefighting
Control run-off water by containing and keeping it out of sewers and watercourses.

Special protective equipment for firefighters
Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Personal precautions
For personal protection, see Section 8. In case of spills, beware of slippery floors and surfaces.

6.2. Environmental precautions
Environmental precautions
Contain spillage with sand or earth. Avoid the spillage or runoff entering drains, sewers or watercourses. The product is insoluble in water and will spread on the water surface.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up
Contain spillage with sand or earth. Collect spillage for reclamation or disposal in sealed containers via a licensed waste contractor. Avoid water contacting spilled material or leaking containers. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body. In case of spillage on water prevent the spread by use of suitable barrier equipment.

6.4. Reference to other sections
Reference to other sections
For personal protection, see Section 8. See Section 11 for additional information on health hazards. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Usage precautions
Avoid spilling. Always remove oil with soap and water or skin cleaning agent, never use organic solvents. Do not use oil-contaminated clothing or shoes, and do not put rags moistened with oil into pockets.

7.2. Conditions for safe storage, including any incompatibilities
Storage precautions
Store in tightly-closed, original container in a dry, cool and well-ventilated place.

Storage class
Miscellaneous hazardous material storage.

7.3. Specific end use(s)
2T Universal Two-Stroke Oil

Specific end use(s)  
The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

Base oil - Unspecified - Distillates (Petroleum), hydrotreated Heavy Paraffinic
Long-term exposure limit (8-hour TWA): ACGIH 5 mg/m³
Short-term exposure limit (15-minute): ACGIH 10 mg/m³

Distillates (petroleum) solvent-dewaxed heavy paraffinic
Long-term exposure limit (8-hour TWA): ACGIH 5 mg/m³
Short-term exposure limit (15-minute): ACGIH 10 mg/m³

ACGIH = American Conference of Governmental Industrial Hygienists.

Adipate ester (CAS: 27178-16-1)

DNEL

Industry - Dermal; systemic effects: 326 mg/kg/day
Industry - Inhalation; systemic effects: 18.2 mg/m³
Consumer - Oral; Long term systemic effects: 19.6 mg/m³

8.2. Exposure controls

Protective equipment

Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles or face shield.

Hand protection

The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.

Other skin and body protection

Use barrier creams to prevent skin contact.

Hygiene measures

Use engineering controls to reduce air contamination to permissible exposure level. Wash promptly with soap and water if skin becomes contaminated.

Respiratory protection

No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

Thermal hazards

Not anticipated under normal conditions of use. The product is combustible if heated excessively and an ignition source is applied.

Environmental exposure controls

Do not allow product to contaminate land.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance

Liquid.
2T Universal Two-Stroke Oil

Colour
Blue.

Odour
Characteristic. Oil-like.

Odour threshold
Not known.

pH
Not applicable.

Melting point
-26°C

Pour point
Initial boiling point and range
>320°C @ 101.3 kPa

Flash point
228°C PMCC (Pensky-Martens closed cup).

Evaporation rate
Not relevant.

Upper/lower flammability or explosive limits
Not known.

Other flammability
Product is not flammable but on excessive heating may become combustible.

Vapour pressure
<0.1 kPa @ 20°C

Vapour density
Not determined.

Relative density
0.880 @ 15.6°C

Solubility(ies)
Insoluble in water. Soluble in the following materials: Organic solvents.

Partition coefficient
Not determined. log Kow: > 7 The above figure is typical of mineral oil.

Auto-ignition temperature
No specific test data are available.

Decomposition Temperature
Not determined.

Viscosity
85 cSt @ 40°C

Explosive properties
Not considered to be explosive.

Explosive under the influence of a flame
Not considered to be explosive.

Oxidising properties
The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidising.

9.2. Other information
Volatile organic compound
The product is a complex mixture, the majority of which would not be classed as a VOC. However it cannot be discounted that trace or low levels of VOC's may be present.

SECTION 10: Stability and reactivity

10.1. Reactivity
Reactivity
There are no known reactivity hazards associated with this product.

10.2. Chemical stability
Stability
Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions
Possibility of hazardous reactions
Unlikely to occur under normal conditions of use. Unlikely to occur.

10.4. Conditions to avoid
Conditions to avoid
Avoid heat, flames and other sources of ignition.
2T Universal Two-Stroke Oil

10.5. Incompatible materials
Materials to avoid

10.6. Hazardous decomposition products
Hazardous decomposition products

SECTION 11: Toxicological information
11.1. Information on toxicological effects
Acute toxicity - oral
Notes (oral LD₅₀)

Acute toxicity - dermal
Notes (dermal LD₅₀)

Acute toxicity - inhalation
Notes (inhalation LC₅₀)

Serious eye damage/irritation

Respiratory sensitisation

Skin sensitisation

Carcinogenicity

Reproductive toxicity
Reproductive toxicity - fertility

Specific target organ toxicity - single exposure
STOT - single exposure

Specific target organ toxicity - repeated exposure
STOT - repeated exposure

Aspiration hazard

General information

Inhalation

Notes (oral LD₅₀)
Not expected to be highly toxic based on information of ingredients. Based on available data the classification criteria are not met.

Notes (dermal LD₅₀)
Not expected to be highly toxic based on information of ingredients. Based on available data the classification criteria are not met.

Notes (inhalation LC₅₀)
Not determined. The product is unlikely to present any significant inhalation hazard at ambient temperatures and under normal conditions of use.

May cause mild, short lasting discomfort to eyes.

No evidence to suggest the product will be a respiratory sensitizer. Repeated exposure to oil mists may cause respiratory damage.

Not expected to be a skin sensitizer based on information on components.

This product contains mineral oils which are considered to be severely refined and not considered to be carcinogenic under IARC. All of the oils in this product have been demonstrated to contain less than 3% extractables by the IP346 test.

No data available to suggest the product will cause reproductive toxicity.

Based on available data the classification criteria are not met.

Based on available data the classification criteria are not met.

Kinematic viscosity > 20.5 mm²/s. The product viscosity is greater than the upper limit assigned for classification. The product contains mineral oil. If aspirated into the lungs e.g. through vomiting after ingestion admit to hospital immediately.

This product has low toxicity. Only large quantities are likely to have adverse effects on human health.

Unlikely to be hazardous by inhalation because of the low vapour pressure of the product at ambient temperature.
## 2T Universal Two-Stroke Oil

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ingestion</strong></td>
<td>No harmful effects expected from quantities likely to be ingested by accident.</td>
</tr>
<tr>
<td><strong>Skin contact</strong></td>
<td>Skin irritation should not occur when used as recommended. Repeated exposure may cause skin dryness or cracking.</td>
</tr>
<tr>
<td><strong>Eye contact</strong></td>
<td>May cause temporary eye irritation.</td>
</tr>
<tr>
<td><strong>Acute and chronic health hazards</strong></td>
<td>Prolonged or repeated contact with used oil may cause serious skin diseases, such as dermatitis and skin cancer.</td>
</tr>
</tbody>
</table>
# 2T Universal Two-Stroke Oil

## SECTION 12: Ecological Information

### Ecotoxicity
Based on available data the classification criteria are not met. Not regarded as dangerous for the environment.

<table>
<thead>
<tr>
<th>12.1. Toxicity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity</td>
<td>Based on available data the classification criteria are not met. Not considered toxic to fish.</td>
</tr>
<tr>
<td>Acute toxicity - aquatic invertebrates</td>
<td>Based on available data the classification criteria are not met.</td>
</tr>
</tbody>
</table>

### 12.2. Persistence and degradability

| Persistence and degradability | The product contains mineral oil which has limited biodegradability in CEC test methods but will biodegrade slowly in aerobic water and sediments and is considered ultimately biodegradable. The product is not readily biodegradable. |
| Stability (hydrolysis) | The product is based on highly refined mineral oils that are considered stable to hydrolysis. |
| Biodegradation | The product is not considered readily biodegradable, albeit the major constituents are expected to ultimately biodegrade. |
| Biological oxygen demand | Not determined. |
| Chemical oxygen demand | Not determined. |

### 12.3. Bioaccumulative potential

| Bioaccumulative potential | Bioaccumulation is unlikely to be significant because of the low water-solubility of this product. |
| Partition coefficient | Not determined. \( \log \text{Kow} > 7 \) The above figure is typical of mineral oil. |

### 12.4. Mobility in soil

| Mobility | The product is non-volatile. The product is insoluble in water and will spread on the water surface. |
| Henry's law constant | Not determined. |

### 12.5. Results of PBT and vPvB assessment

| Results of PBT and vPvB assessment | This product does not contain any substances classified as PBT or vPvB. |

### 12.6. Other adverse effects

| Other adverse effects | None known. |

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

| General information | Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. |
| Disposal methods | Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. |
| Waste class | European waste catalogue (EWC) number = 13 02 08* |

## SECTION 14: Transport information

| General | The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID). |
2T Universal Two-Stroke Oil

14.1. UN number
Not applicable.

14.2. UN proper shipping name
Not applicable.

14.3. Transport hazard class(es)
Not applicable.

14.4. Packing group
Not applicable.

14.5. Environmental hazards
Environmentally hazardous substance/marine pollutant

14.6. Special precautions for user
Not applicable.

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

SECTION 15: Regulatory information

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

National regulations
- Health and Safety at Work etc. Act 1974 (as amended).
- Special Waste regulations 1996.
- Control of Pollution (Oil Storage) (England) Regulations 2001

EU legislation
- Dangerous Preparations Directive 1999/45/EC.
- Dangerous Substances Directive 67/548/EEC.

Guidance
- Workplace Exposure Limits EH40.
- Safety Data Sheets for Substances and Preparations.

15.2. Chemical safety assessment
No chemical safety assessment has been carried out.

Inventories

Canada - DSL/NDSL
- All the ingredients are listed or exempt.

US - TSCA
- All the ingredients are listed or exempt.
2T Universal Two-Stroke Oil

Australia - AICS
All the ingredients are listed or exempt.

Korea - KECI
All the ingredients are listed or exempt.

China - IECSC
All the ingredients are listed or exempt.

Philippines – PICCS
All the ingredients are listed or exempt.

New Zealand - NZIOC
All the ingredients are listed or exempt.

SECTION 16: Other information

Revision comments  NOTE: Lines within the margin indicate significant changes from the previous revision.
Issued by  Regulatory Affairs
Revision date  21/10/2015
Revision  8
Supersedes date  22/05/2015
SDS number  21677

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