SAFETY DATA SHEET  
Terralus BVG 32

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

1.1. Product identifier

Product name: Terralus BVG 32  
Product number: 7645  
Internal identification: GHS21627  
REACH registration number: n/a  Mixture

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

Identified uses: Biodegradable Hydraulic Oil  
Uses advised against: No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier: Morris Lubricants  
Castle Foregate  
Shrewsbury  
Shropshire  
SY1 2EL  
+44 (0) 1743 232200  
+44 (0) 1743 353584  
sds@morris-lubricants.co.uk

Manufacturer: MORRIS LUBRICANTS  
Castle Foregate  
Shrewsbury  
Shropshire  
SY1 2EL  
UK  
+44 (0) 1743 232200  
+44 (0) 1743 353584  
sds@morris-lubricants.co.uk

1.4. Emergency telephone number

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

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
Terralus BVG 32

Hazard statements
NC Not Classified

Supplemental label
EUH210 Safety data sheet available on request.

2.3. Other hazards
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>Sunflower oil</th>
<th>60-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number:</td>
<td>164250-88-8</td>
</tr>
</tbody>
</table>

Classification
Not Classified

Classification (67/548/EEC or 1999/45/EC)
-

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

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.

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

Inhalation
Upper respiratory irritation.

Ingestion
May cause discomfort if swallowed.

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

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.

5.3. Advice for firefighters
Terralus BVG 32

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. Take care as floors and other surfaces may become slippery. Keep unnecessary and unprotected personnel away from the spillage.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Methods for cleaning up
In case of spillage on water prevent the spread by use of suitable barrier equipment Contain and absorb spillage with sand, earth or other non-combustible material. Collect and place in suitable waste disposal containers and seal securely. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

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

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)

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
Sunflower oil
Long-term exposure limit (8-hour TWA): 10 mg/m³

Highly refined mineral oil (C15 - C50)
Long-term exposure limit (8-hour TWA): 5 mg/m³

Octylamine (CAS: 111-86-4)

PNEC
Fresh water; 0.0002 mg/l

8.2. Exposure controls
Terralus BVG 32

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.

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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance
Liquid.

Colour
Pale Amber

Odour
Oil-like.

Odour threshold
Not known.

Melting point
Not applicable.

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

Flash point
191°C 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.

Relative density
0.910 @ 15.6°C

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

Partition coefficient
Not determined. log Kow:>7 Typical of mineral oil.

Auto-ignition temperature
No specific test data are available.

Decomposition Temperature
Not determined.

Viscosity
33 cSt @ 40°C

Explosive properties
Not considered to be explosive.

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

Under normal conditions of storage and use, no hazardous reactions will occur.

10.4. Conditions to avoid

Conditions to avoid

Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials to avoid

Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products


SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀)

Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD₅₀)

Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC₅₀)

The product is unlikely to present any significant inhalation hazard at ambient temperatures and under normal conditions of use.

Serious eye damage/irritation

May cause mild, short lasting discomfort to eyes.

Respiratory sensitisation

Repeated exposure to oil mists may cause respiratory damage. There is no evidence that the product can cause respiratory hypersensitivity.

Skin sensitisation

Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility

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

Specific target organ toxicity - single exposure

STOT - single exposure

Based on available data the classification criteria are not met.
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Specific target organ toxicity - repeated exposure
STOT - repeated exposure  Based on available data the classification criteria are not met.

Aspiration hazard  Kinematic viscosity $> 20.5 \text{ mm}^2/\text{s}$. The product viscosity is greater than the upper limit assigned for classification.

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

Inhalation  Unlikely to be hazardous by inhalation because of the low vapour pressure of the product at ambient temperature.

Ingestion  No harmful effects expected from quantities likely to be ingested by accident.

Skin contact  Skin irritation should not occur when used as recommended. Repeated exposure may cause skin dryness or cracking.

Eye contact  May cause temporary eye irritation.

Acute and chronic health hazards  Prolonged or repeated contact with used oil may cause serious skin diseases, such as dermatitis and skin cancer.
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SECTION 12: Ecological information

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

12.1. Toxicity
Toxicity Based on available data the classification criteria are not met. Not considered toxic to fish.

Acute aquatic toxicity
Acute toxicity - aquatic invertebrates Based on available data the classification criteria are not met.

12.2. Persistence and degradability
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 Kow:>7 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
Disposal methods Dispose of waste via a licensed waste disposal contractor.

Waste class European Waste Catalogue (EWC) code: 13 01 12 (readily biodegradable hydraulic oils)

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number
Not applicable.

14.2. UN proper shipping name
Not applicable.

14.3. Transport hazard class(es)
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No transport warning sign required.

14.4. Packing group
Not applicable.

14.5. Environmental hazards
Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user
Not applicable.

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

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).
Control of Substances Hazardous to Health Regulations 2002 (as amended).
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].
EH40/2005 Workplace exposure limits.

EU legislation

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.

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.
Terralus BVG 32

Philippines – PICCS
All the ingredients are listed or exempt.

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

### SECTION 16: Other information

<table>
<thead>
<tr>
<th>Abbreviations and acronyms used in the safety data sheet</th>
<th>Definitions</th>
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<tbody>
<tr>
<td>ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.</td>
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<td>CAS: Chemical Abstracts Service.</td>
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<td>DNEL: Derived No Effect Level.</td>
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<td>GHS: Globally Harmonized System.</td>
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<td>IATA: International Air Transport Association.</td>
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<td>IMDG: International Maritime Dangerous Goods.</td>
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<tr>
<td>vPvB: Very Persistent and Very Bioaccumulative.</td>
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**Revision comments**

NOTE: Lines within the margin indicate significant changes from the previous revision.

**Issued by**

Regulatory Affairs

**Revision date**

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**Revision**

2

**Supersedes date**

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**SDS number**

21627

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