# SAFETY DATA SHEET
## VACUUM PUMP OIL

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

1. **Product identifier**
   - **Product name**: Vacuum Pump Oil
   - **Product number**: VPO1
   - **Internal identification**: VPO1
   - **REACH registration number**: n/a  Mixture

2. **Relevant identified uses of the substance or mixture and uses advised against**
   - **Identified uses**: Machine Oil
   - **Uses advised against**: Non specified unless otherwise stated within this SDS

3. **Details of the supplier of the safety data sheet**
   - **Supplier**: Easy Composites Ltd
     - Unit 39
     - Park Hall Business Village
     - Longton, Stoke-on-Trent
     - ST3 5XA
     - United Kingdom
   - **Tel**: +44 (0) 1782 454499
   - **Fax**: +44 (0) 1782 596868
   - **sales@easycomposites.co.uk**

4. **Emergency telephone number**
   - **Emergency telephone**: +44 (0) 1782 454499
   - **(office hours only)**

### SECTION 2: Hazards identification

1. **Classification of the substance or mixture**
   - **Classification**
     - **Physical hazards**: Not Classified
     - **Health hazards**: Not Classified
     - **Environmental hazards**: Not Classified

   **Classification (1272/2008 EC or 1999/45/EC)**: Not Classified

2. **Label elements**
   - **Hazard statements**: NC Not Classified

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>Base oil - Unspecified - Distillates (Petroleum), hydrotreated</th>
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</thead>
<tbody>
<tr>
<td>Heavy Paraffinic</td>
</tr>
<tr>
<td>60-100%</td>
</tr>
<tr>
<td>CAS number: 64742-54-7</td>
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<tr>
<td>EC number: 265-157-1</td>
</tr>
<tr>
<td>REACH registration number: 01-2119484627-25-XXXX</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Classification</th>
<th>CLP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Classified</td>
<td>Classification (1272/2008EC or 1999/45/EC)</td>
</tr>
<tr>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>

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 vomiting, 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 vomiting 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

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)

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
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Long-term exposure limit (8-hour TWA): ACGIH 5 mg/m³
Short-term exposure limit (15-minute): ACGIH 10 mg/m³

Diphenylamine
Short-term exposure limit (15-minute): WEL 20 mg/m³
Long-term exposure limit (8-hour TWA): WEL 10 mg/m³
ACGIH = American Conference of Governmental Industrial Hygienists.
WEL = Workplace Exposure Limit

Benzenamine,N-phenyl-, reaction products with 2,4,4-triethylpentane (CAS: 68411-46-1)

| DNEL | Workers - Dermal; Long term systemic effects: 0.62 mg/kg
|          | Workers - Inhalation; Long term systemic effects: 4.37 mg/m³
|          | Consumer - Dermal; Long term systemic effects: 0.31 mg/kg
|          | Consumer - Inhalation; Long term systemic effects: 1.09 mg/m³
|          | Consumer - Oral; Long term systemic effects: 0.31 mg/kg
| PNEC | - Fresh water; 0.051 mg/l
|          | - Marine water; 0.0051 mg/l
|          | - Intermittent release; 0.51 mg/l
|          | - Sediment (Freshwater); 9320 mg/kg
|          | - Sediment (Marine water); 932 mg/kg
|          | - Soil; 1860 mg/kg
|          | - STP; 1 mg/l

Diphenylamine (CAS: 122-39-4)

| DNEL | Workers - Dermal; Long term systemic effects: 0.62 mg/kg
|          | Workers - Inhalation; Long term systemic effects: 4.37 mg/m³
|          | Consumer - Dermal; Long term systemic effects: 0.31 mg/kg
|          | Consumer - Inhalation; Long term systemic effects: 1.09 mg/m³
|          | Consumer - Oral; Long term systemic effects: 0.31 mg/kg
| PNEC | - Fresh water; 0.051 mg/l
|          | - Marine water; 0.0051 mg/l
|          | - Intermittent release; 0.51 mg/l
|          | - Sediment (Freshwater); 9320 mg/kg
|          | - Sediment (Marine water); 932 mg/kg
|          | - Soil; 1860 mg/kg
|          | - STP; 1 mg/l

8.2. Exposure controls

Protective equipment

Appropriate engineering controls

Eye/face protection

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

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.
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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.

Colour
Amber.

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
224°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 This figure is typical of mineral oil.

Auto-ignition temperature
No specific test data are available.

Decomposition Temperature
Not determined.

Viscosity
93 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 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.

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

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

Acute toxicity - inhalation
Notes (inhalation LC₅₀)
Not determined. 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
Respiratory sensitisation
No evidence to suggest the product will be a respiratory sensitizer. Repeated exposure to oil mists may cause respiratory damage.

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

Carcinogenicity

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Carcinogenicity
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.

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.

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 mm²/s. The product viscosity is greater than the upper limit assigned for classification. Although not classified, the product contains mineral oil. If aspirated into the lungs e.g. through vomiting after ingestion, admit to hospital immediately.

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.

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

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.

Stability (hydrolysis) The product is based on highly refined mineral oils that are considered stable to hydrolysis.

Biodegradation The product is not considered readily biodegradeable, 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 $K_{ow}$: > 7 This 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: This material and its container must be disposed of as hazardous waste. Dispose of waste via a licensed waste disposal contractor.

Disposal methods: Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Dispose of waste via a licensed waste disposal contractor.

Waste class: European waste catalogue (EWC) number = 13 02 05* (mineral based non-chlorinated engine, gear & lubricating 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)

No transport warning sign required.

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 MARPOL73/78 and the IBC Code

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

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.

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.

Revision date
27/11/2015

Revision
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This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company’s knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.