



# Safety Data Sheet

Issue Date: 21 December 2016

Issued by: Royal Precision Lubricants

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## Product: Eco Biodraulic 46

### Section 1. Identification

#### Product Details

Product Identifier Eco Biodraulic 46  
Product Code 9025  
Recommended Use Hydraulic Oil

#### Manufacturer or Supplier Details

Supplier Royal Precision Lubricants Pty Ltd (ABN 72 155 989 165)  
Address 40 Kimberly Road, DANDENONG SOUTH, Vic 3175  
Telephone +61 3 9768 2441  
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### Section 2. Hazard(s) Identification

#### GHS Classification

Not classified as hazardous under the Globally Harmonised System (GHS)

#### GHS Label Elements

Hazard Pictogram No hazard symbol required  
Signal Word No signal word

#### Hazard Statements

Physical Hazards Not classified as a physical hazard under GHS criteria  
Health Hazards Not classified as a health hazard under GHS criteria  
Environmental Hazards Not classified as an environmental hazard under GHS criteria

#### Precautionary Statements

Prevention Not applicable  
Response Not applicable  
Storage Not applicable  
Disposal Not applicable  
Supplemental label elements Not applicable

Other hazards which do not result in classification Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis. Used oil may contain harmful impurities.

### Section 3. Composition and Information on Ingredients

Chemical Nature: Highly refined mineral oils and proprietary performance additives.  
The highly refined mineral oil contains <3% (w/w) DMSO-extract, according to IP346

Ingredients:

Ingredient	% (w/w)	CAS Number
Base oil - unspecified	>75 - <95	Varies – See Abbreviations Section 16
Additives – not hazardous	>5 - <25	Not applicable

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There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

**Section 4. First-aid measures**

<b>Eye contact:</b>	Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.
<b>Inhalation:</b>	No treatment necessary under normal conditions of use. If symptoms persist, obtain medical attention.
<b>Skin contact:</b>	Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention.
<b>If swallowed:</b>	In general no treatment is necessary unless large quantities are swallowed. Do not induce vomiting and obtain medical advice.
<b>Most important symptoms and effects, both acute and delayed:</b>	Oil acne/folliculitis signs and symptoms may include formation of black pustules and spots on the skin of exposed areas. Swallowing may result in nausea, vomiting and/or diarrhoea.
<b>Protection of first-aiders:</b>	When administering first aid, ensure that you are wearing the appropriate personal protective equipment according to the incident, injury and surroundings.
<b>Notes to physician:</b>	Treat symptomatically.

**Section 5. Fire-fighting measures**

<b>Suitable extinguishing equipment:</b>	Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. <b>Do not use water in a jet.</b>
<b>Specific hazards during firefighting:</b>	Combustible liquid. In a fire, or if heated, a pressure increase will occur and the container may burst with the risk of a subsequent explosion. May produce toxic fumes if burning including possibly carbon monoxide, airborne solid and liquid particulates and gases and unidentified organic and inorganic compounds.
<b>Special protective equipment and precautions for firefighters:</b>	Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Positive pressure Self-Contained Breathing Apparatus and full turn out gear should be worn.
<b>HazChem Code:</b>	None

**Section 6. Accidental release measures**

<b>Personal precautions, protective equipment and emergency procedures:</b>	Avoid contact with skin and eyes, use appropriate personal protective equipment. Evacuate surrounding areas if necessary. Remove all ignition sources.
<b>Environmental precautions:</b>	Stop leak if without risk. Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth or other appropriate barriers. Local authorities should be advised if significant spillages cannot be contained.
<b>Methods and materials for containment and cleaning up:</b>	Slippery when spilt. Avoid accidents, clean up immediately. Reclaim liquid directly or in an absorbent. Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly.

**Section 7. Handling and storage**

<b>Precautions for safe handling:</b>	Use in a well ventilated area. Wear appropriate protective equipment (See Section 8) and clothing to
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	avoid inhalation of fumes or mist and contact with skin and eyes. Containers not in use should be closed. Do not smoke. Always wash hands after handling and prior to eating, drinking, smoking or using the toilet.
<b>Conditions for safe storage, including any incompatibilities:</b>	Classified as a Class C2 (COMBUSTIBLE LIQUID) for the purposes of storage and handling. Store in a cool, well ventilated area away from heat and other sources of ignition, oxidising agents, foodstuffs, and out of direct sunlight. Keep containers securely sealed and protect against damage.

### Section 8. Exposure controls and personal protection

<b>National Exposure Standards:</b>	No exposure standard has been established, however, the TWA National Occupational Health and Safety Commission (NOHSC) exposure standard for oil mist is 5 mg/m <sup>3</sup> . As with all chemicals, exposure should be kept to the lowest possible level.
<b>Biological limit values:</b>	Not available
<b>Engineering Controls:</b>	<b>Ventilation</b> - Use in well ventilated areas. Where ventilation is inadequate, a local exhaust ventilation system is required.
<b>Personal Protective Equipment</b>	
<b>Respiratory Protection:</b>	Normally not required, however if mists or vapours are generated in a poorly ventilated area an approved respirator with a replaceable vapour/mist filter is recommended.
<b>Eye Protection:</b>	Safety glasses with side shields, goggles or full face mask as appropriate. Individual circumstances will dictate the final choice of protection.
<b>Skin / Body Protection:</b>	Always wear long sleeves and long trousers or coveralls, and enclosed footwear or safety boots when handling this product. It is recommended that chemical resistant gloves (e.g. PVC) be worn when handling this product.

### Section 9. Physical and Chemical Properties

Appearance	Viscous amber liquid
Melting Point	Not available
Boiling Point	Not available
Vapour Pressure	Not available
Solubility in Water	Insoluble
pH Value	Not applicable
Viscosity @ 40°C	46 cSt
Viscosity @ 100°C	9.099999999999996 cSt
Specific Gravity	0.91
Flash Point	>220°C
Flammability	Combustible Liquid
Auto Ignition Temperature	Not available
Flammable Limits	Not available

### Section 10. Stability and Reactivity

<b>Reactivity:</b>	No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.
<b>Chemical stability:</b>	Stable under normal conditions of storage and handling.
<b>Possibility of hazardous reactions:</b>	Reacts with strong oxidising agents.
<b>Conditions to avoid:</b>	Heat, direct sunlight, open flames or other sources of ignition.
<b>Incompatible Materials:</b>	Strong oxidizing agents.
<b>Hazardous Decomposition Products:</b>	Under normal conditions of storage and use hazardous decomposition products are not expected to be produced.

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## Section 11. Toxicological information

Information given is based on data on the components and the toxicology of similar products. Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for the individual component(s).

Skin and eye contact are the primary routes of exposure although exposure may occur following accidental swallowing.

<b>Acute toxicity</b>	<i>Acute oral toxicity:</i> LD50 rat: >5,000 mg/kg. Expected to be of low toxicity. <i>Acute inhalation toxicity:</i> Not considered to be an inhalation hazard under normal conditions of use. <i>Acute dermal toxicity:</i> LD50 rabbit: >5,000 mg/kg. Expected to be of low toxicity.
<b>Skin corrosion/irritation</b>	Expected to be slightly irritating. Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.
<b>Serious eye damage/eye irritation</b>	Expected to be slightly irritating
<b>Respiratory or skin sensitisation</b>	Not expected to be a skin sensitiser.
<b>Germ cell mutagenicity</b>	Not considered a mutagenic hazard.
<b>Carcinogenicity</b>	Not expected to be carcinogenic. Product contains mineral oils of types shown to be non-carcinogenic in animal skin-painting studies. Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC).
<b>Reproductive toxicity</b>	Not expected to impair fertility. Not expected to be developmental toxicant.
<b>STOT – single exposure</b>	Not expected to be a hazard.
<b>STOT – repeated exposure</b>	Not expected to be a hazard.
<b>Aspiration toxicity</b>	Not considered an aspiration hazard.
<b>Further information</b>	<b>USED</b> oils may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal. ALL used oil should be handled with caution and skin contact avoided as far as possible.

## Section 12. Ecological information

Eco toxicological data has not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products. Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).

<b>Ecotoxicity</b>	
Toxicity to fish (Acute toxicity)	Expected to be practically non-toxic.
Toxicity to crustacean (Acute toxicity)	Expected to be practically non-toxic.
Toxicity to algae/aquatic plants (Acute toxicity)	Expected to be practically non-toxic.
Toxicity to fish (Chronic toxicity)	Data not available.
Toxicity to crustacean (Chronic toxicity)	Data not available.
Toxicity to microorganisms (Acute toxicity)	Data not available.
<b>Persistence and degradability</b>	
Biodegradability	Expected to be not readily biodegradable. Major constituents are expected to be inherently biodegradable, but contains components that may persist in the environment.
<b>Bioaccumulative potential</b>	
Bioaccumulation	Contains components with the potential to bio accumulate.
Partition coefficient: n-octanol/water	Pow: >6 based on information on similar products.
<b>Mobility in soil</b>	
Mobility	Liquid under most environmental conditions. If it enters soil, it will adsorb to soil particles and will not be mobile. Floats on water.
<b>Other adverse effects</b>	
Additional ecological information	Product is a mixture of non-volatile components which are not expected to be released to air in any significant quantities.

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Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.  
 Poorly soluble mixture. May cause physical fouling of aquatic organisms.  
 Mineral oil is not expected to cause any chronic effects to aquatic organisms at concentrations less than 1 mg/l.

**Section 13. Disposal considerations****Disposal methods**

Waste from residues

Waste product should not be allowed to contaminate soil or ground water or be disposed of into the environment.  
 Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

Dispose in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand.

**Special precautions for landfill or incineration**

No additional special precautions identified.

**Section 14. Transport Information****National Regulations**

ADG

Not regulated as a dangerous good.

**International Regulations**

IATA-DGR

Not regulated as a dangerous good.

IMDG-DGR

Not regulated as a dangerous good.

**Section 15. Regulatory Information****Standard Uniform Schedule of Medicine and Poisons**

Not scheduled

**Model Work Health and Safety Regulations – Scheduled Substances**

Not listed

**Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code)**

Not regulated

**Section 16. Other Information****Date of Issue**

Wednesday, 21 December 2016

**Abbreviations**

ADG = Australian Dangerous Goods

GHS = Globally Harmonised System of Classification and Labelling of chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk container

IMDG = International Maritime Dangerous Goods

STEL = Short term exposure limit

TWA = time weighted average

Varies = may contain one or more of the following 101316-69-2, 101316-70-5, 101316-71-6, 101316-72-7, 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64741-97-5, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-64-9, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1, 74869-22-0, 90669-74-2

**Other Information**

The information contained in this SDS is as accurate as we can ascertain at this time. However, as the information is gleaned from a number of third party sources, Royal Precision Lubricants can make no warranty, guarantee or statement as to the reliability or completeness of the information. Royal Precision Lubricants will not accept liability of any damages whatsoever arising from the reliance

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of this information. It is the responsibility of the person handling the product to satisfy themselves as to the suitability and completeness of such information for their own use.

....End of SDS....