ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

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

1.1 Product identifier

Product Name	Pro Power DOT 4 Brake Fluid
Product code	E444
Unique Formula Identifier (UFI)	9TG0-00PW-P00M-4KUP

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

Identified Use(s)	Hydraulic Fluid.
Uses Advised Against	Not known.

1.3 Details of the supplier of the safety data sheet

Manufacturer

Company Identification	Rapid Group UK
Address of Manufacturer	Rutland Mill, Adelaide Street, Bolton,
Postal code	BL3 3NY
Telephone:	01204 324 268

Supplier

Company Identification	Rapid Ireland
Address of Responsible Person	Rock Street, Tralee,, Co Kerry
Postal code	V92 WR9P
Telephone:	+353 151 363 47

1.4 Emergency telephone number

Emergency Phone No.	999
Contact	NHS

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Regulation (EC) No. 1272/2008 (CLP)	Eye Irrit. 2 :Causes serious eye irritation. Repr. 2; H361d, Suspected of damaging the unborn child.

2.2 Label elements

According to Regulation (EC) No. 1272/2008 (CLP)

Product Name	Pro Power DOT 4 Brake Fluid
Contains	tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate. 2-(2-methoxyethoxy)ethanol diethylene glycol monomethyl ether. 2-[2-(2-butoxyethoxy)ethoxy]ethanol TEGBE triethylene glycol monobutyl ether butoxytriethylene glycol

Hazard Pictogram(s)

GHS08

GHS07

Signal Word(s) Warning.

Hazard Statement(s)
H319: Causes serious eye irritation.
H361d, Suspected of damaging the unborn child.

Precautionary Statement(s)
P101, If medical advice is needed, have product container or label at hand.
P102, Keep out of reach of children
P264, Wash hands/exposed areas thoroughly after handling.
P301+P310, IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P337+P313, If eye irritation persists: Get medical advice/attention.
P305+P351+P338, IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501, Dispose of contents/container to an approved waste disposal plant.

Unique Formula Identifier (UFI) 9TG0-00PW-P00M-4KUP

2.3 Other hazards

None Known.

2.4 Additional Information

For the full text of the Hazard-Statements mentioned in this Section, see Section 16

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable.

3.2 Mixtures

HAZARDOUS INGREDIENT(S)	CAS No.	EC No. / REACH Registration No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
2-[2-(2-butoxyethoxy)ethoxy]ethanol TEGBE triethylene glycol monobutyl ether butoxytriethylene glycol	143-22-6	205-592-6	20-29.9	Eye Dam. 1 H318	GHS05
2,2' -oxybisethanol diethylene glycol	111-46-6	203-872-2	15-24	Acute Tox. 4 H302	GHS07
tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate	30989-05-0	250-418-4	5 - 20	Repr. 2 H361d	GHS08
?, Polyethylene glycol butyl ether	9004-77-7	500-012-0	8-10	Eye Irrit. 2 H319	GHS07

2-(2-butoxyethoxy)ethanol diethylene glycol monobutyl ether	112-34-5	203-961-6	0-2.99	Eye Irrit. 2 H319	GHS07
2-(2-methoxyethoxy)ethanol diethylene glycol monomethyl ether	111-77-3	203-906-6	0-2.99	Repr. 2 H361d	GHS08

HAZARDOUS INGREDIENT(S)	CAS No.	Specific Concentration Limit		M-factor	ATE
2-[2-(2-butoxyethoxy)ethoxy]ethanol TEGBE triethylene glycol monobutyl ether butoxytriethylene glycol	143-22-6	Eye Dam. 1	C>= 30.00 <= 100.00		
		Eye Irrit. 2	C>= 20.00 < 30.00		
2,2' -oxybisethanol diethylene glycol	111-46-6				Acute Tox. 4 (H302) :500.000

Contains no non-classified vPvB substances.
Contains no non-classified substances with a Union workplace exposure limit.
For full text of H/P Statements see section 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation	Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her. If recovery is not rapid, seek medical attention
Skin Contact	Immediately remove contaminated clothing and shoes. Ensure that skin, which has been exposed to the material, is washed thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.
Eye Contact	Remove contact lenses. Flush eyes immediately with plenty of water or isotonic water (20-30°C) for at least 5 minutes and continue until irritation stops. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.
Ingestion	Provide plenty of water for the person to drink and stay with him/her. Seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the victim lean forward with head down to avoid inhalation of- or choking on vomited material. If medical attention is delayed, give adults 90-120 ml hard liquor such as 40% v/v spirits. Give children proportionately less at a rate of 2ml/kg body weight.

4.2 Most important symptoms and effects, both acute and delayed

The most important symptoms are described in sections 2 and 11.
Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

4.3 Indication of any immediate medical attention and special treatment needed

IF exposed or concerned:
Get immediate medical advice/attention.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing media	Alcohol-resistant foam, carbonic acid, powder, water mist.
Unsuitable extinguishing media	Waterjets should not be used, since they can spread the fire. However they may be used to cool adjacent containers.

5.2 Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers,
which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the
sewage system and nearby surface waters.
If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds
are produced. These are:
Carbon oxides (CO / CO☐).

5.3 Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact.
Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances.
Avoid inhalation of vapours from spilled material.
Prevent unnecessary personnel entering area of spillage. When cleaning up large spills appropriate protective clothing should be worn -see section 8.

6.2 Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

6.3 Methods and material for containment and cleaning up

Limit spillage and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.
Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent
materials and place in container for disposal, according to local regulations.
Wherever possible cleaning should be performed with normal cleaning agents.
Avoid use of solvents.

6.4 Reference to other sections

See Also Section 8, 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid any method of handling that generates mists or aerosols.
Do not eat, drink or smoke when handling this product.
See section on 'Exposure controls/personal protection' for information on personal protection.

7.2 Conditions for safe storage, including any incompatibilities

Always store in containers of the same material as the original container.
Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Storage temperature	Room temperature 15 to 30°C
Storage life	Stable under normal conditions.
Incompatible materials	None known.

7.3 Specific end use(s)

This product should only be used for applications quoted in section 1.2

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits

—
2,2' -oxybisethanol;
Long term exposure limit (8 hours): 23 ppm
Long term exposure limit (8 hours): 101 mg/m³

—
2-(2-butoxyethoxy)ethanol;
Long term exposure limit (8 hours): 10 ppm
Long term exposure limit (8 hours): 67,5 mg/m³
Short term exposure limit (15 minutes): 15 ppm
Short term exposure limit (15 minutes): 101,2 mg/m³

—
2-(2-methoxyethoxy)ethanol;
Long term exposure limit (8 hours): 10 ppm
Long term exposure limit (8 hours): 50,1 mg/m³
Annotations:
Sk = Can be absorbed through the skin and lead to systemic toxicity.
The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677
The Stationery Office 2002.
EH40/2005 Workplace exposure limits (Fourth Edition 2020)

DNEL

Product/Ingredient name	DNEL	Route of exposure	Duration
Butyl Triglycol	50mg/kgBW/day	Dermal	Long term – Systemic effects - Workers

Butyl Triglycol	195mg/m3	Inhalation	Long term – Systemic effects - Workers
2,2' -oxybisethanol;	106 mg/kgBW / Day	Dermal	Long term – Systemic
2,2' -oxybisethanol;	60mg/m3	Inhalation	Long term – Systemic effects - Workers
Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate	8.3 mg/kgBW/day	Dermal	Long term – Systemic effects - Workers
Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate	29.1 mg/m3	Inhalation	Long term – Systemic effects - Workers
2-(2-butoxyethoxy)ethanol;	20mg/kgBW/day	Dermal	Long term – Systemic effects - Workers
2-(2-butoxyethoxy)ethanol;	67mg/m3	Inhalation	Long term – Systemic effects - Workers
2-(2-butoxyethoxy)ethanol;	0.53mg/kg BW/day	Dermal	Long term – Systemic effects - Workers
2-(2-butoxyethoxy)ethanol;	50.1mg/m3	Inhalation	Long term – Systemic effects - Workers

PNEC

Product/Ingredient name	PNEC	Route of exposure	Duration
Butyl Triglycol	5mg/L	Water	Single
Butyl Triglycol	200mg/L	Sewage Treatment Plant	Continuous
2,2' -oxybisethanol;	10mg/L	Water	Single
2,2' -oxybisethanol;	199.5mg/L	Sewage Treatment Plant	Continuous
Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate	2.112 mg/l	Water	Single
Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate	100 mg/l	Sewage Treatment Plant	Continuous
2-(2-butoxyethoxy)ethanol;	3.9mg/L	Water	Single
2-(2-butoxyethoxy)ethanol;	200mg/L	Sewage Treatment Plant	Continuous
2-(2-butoxyethoxy)ethanol;	12mg/L	Water	Single
2-(2-butoxyethoxy)ethanol;	10000mg/L	Sewage Treatment Plant	Continuous

8.2 Exposure controls

8.2.1. Appropriate engineering controls

Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations

Do not eat, drink or smoke in the workplace

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

Airborne vapour and mist concentrations must be kept at a minimum and below current limit values (see above).

Installation of a Local exhaust system if normal air flow in the work room is not sufficient is recommended.

Ensure emergency eyewash and -showers are clearly marked.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

8.2.2. Personal protection equipment

Eye Protection — Wear eye protection with side protection (EN166).

Skin protection — Wear Impervious Gloves (EN374-2, EN374-3, EN388)

Respiratory protection — In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards — None known.

8.2.3. Environmental Exposure Controls — Do not release large quantities into the surface water or into drains.

Keep spill absorbent materials available in the workplace. If possible, clean up any spills immediately.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	Liquid.
Colour	Amber
Odour	Characteristic odour
Melting point/freezing point	< -50
Boiling point or initial boiling point and boiling range	>210 °C
Flammability	Not known.
Lower and upper explosion limit	Not known.
Flash Point	>100 °C
Auto-ignition temperature	>280 °C
Decomposition Temperature	300
pH	7-10.5

Kinematic Viscosity	5-10 centistokes (20.00 °C)
Solubility	Solubility (Water) : Soluble Solubility (Other) : Not known.
Partition coefficient n-octanol/water (log value)	1.50
Vapour pressure	1.00 millibar
Density and/or relative density	Density (g/ml) : 1.01-1.06 g/cm³ - Relative density : 15 °C
Relative vapour density	Not known.
Particle characteristics	Not known.

9.2 Other information

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

None anticipated.

10.2 Chemical Stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known if used for its intended purpose.

10.4 Conditions to avoid

None anticipated.

10.5 Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects

Acute toxicity - Ingestion	Based on read across data toxicity is low (LD 50 Rat >5000 mg/kg). Sparse experience indicates toxicity in man could be greater.
Acute toxicity - Skin Contact	Based on read across data toxicity is low (LD 50 Rabbit >3000 mg/kg.
Acute toxicity - Inhalation	Not applicable due to low vapour pressure of product.
Acute toxicity -General	Although acute toxicity of this product is low, if significant amounts are absorbed there is a risk of renal damage which could lead to kidney failure or even death. Other symptoms of overexposure include Central Nervous System effects, abdominal discomfort, metabolic acidosis and headache or nausea.
Skin corrosion/irritation	Based on available data, the classification criteria are not met. However, repeated contact may de-fat the skin and cause dermatitis.
Serious eye damage/irritation	Causes serious eye irritation.

Skin sensitization data	Not classified.
Respiratory sensitization data	Not classified.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Not classified.
Reproductive toxicity	Suspected of damaging the unborn child.
Lactation	Not classified.
STOT - single exposure	Not classified.
STOT - repeated exposure	Not classified.
Aspiration hazard	Not classified.

11.2 Information on other hazards

Long term effects

Reproductive toxicity: This product contains teratogenic substances, which may produce anomalies and/or developmental defects to the human offspring. Adverse effects include: death, growth retardation, congenital disorders, delayed mental development, and functional disorders.

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Product is of low ecotoxicity

Fish 96h LC50 >100mg/l (Oncorhynchus Mykiss)

Daphnia 48h EC50 Not determined but expected to be virtually non-toxic

Algae 72h EC50 Not determined but expected to be virtually non-toxic

12.2 Persistence and degradability

Product is inherently biodegradable and is expected to be readily biodegradable based on ingredients (OECD 302B).

If admitted into adapted biological water treatment plants no adverse effects of the degrading action of the live sludge are expected

12.3 Bioaccumulative potential

Not expected to Bio-accumulate. Log POW for all main ingredients <2.0

12.4 Mobility in soil

Product is soluble in water and will be mobile in soil until degraded. Volatilisation from water to air not expected.

12.5 Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6 Endocrine disrupting properties

None known.

12.7 Other adverse effects

Not known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product is covered by the regulations on hazardous waste.
Dispose of in accord with local and national regulations. Recycling or controlled incineration with energy recovery are recommended.

13.2 Additional Information

No special precautions are required for this product.

SECTION 14: TRANSPORT INFORMATION

Not classified as hazardous for transport.

14.1 UN number or ID number

Not dangerous goods according to ADR, IATA and IMDG.

14.2 UN proper shipping name

Not dangerous goods according to ADR, IATA and IMDG.

14.3 Transport hazard class(es)

Not dangerous goods according to ADR, IATA and IMDG.

14.4 Packing group

Not dangerous goods according to ADR, IATA and IMDG.

14.5 Environmental hazards

Not applicable.

14.6 Special precautions for user

Not applicable

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: REGULATORY INFORMATION

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

European Regulations - Authorisations and/or Restrictions On Use

Candidate List of Substances of Very High Concern for Authorisation	Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.
REACH: ANNEX XIV list of substances subject to authorisation	Not listed
REACH: Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	2-(2-butoxyethoxy)ethanol (DEGBE) (112-34-5), 2-(2-methoxyethoxy)ethanol (DEGME) (111-77-3), 2-[2-(2-butoxyethoxy)ethoxy]ethanol TEGBE triethylene glycol monobutyl ether butoxytriethylene glycol (143-22-6), 2,2' -oxybisethanol diethylene glycol (111-46-6), ?, Polyethylene glycol butyl ether (9004-77-7)
Community Rolling Action Plan (CoRAP)	2,2'-oxydiethanol (111-46-6)
Regulation (EC) N° 850/2004 of the European Parliament and of the Council on persistent organic pollutants	Not listed

Regulation (EC) N° 1005/2009 on substances that deplete the ozone layer	Not listed
Regulation (EU) N° 649/2012 of the European Parliament and of the Council concerning the export and import of hazardous chemicals	Not listed

National regulations

Other	Not known.

15.2 Chemical Safety Assessment

A REACH chemical safety assessment has not been carried out.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements:

LEGEND

Hazard Pictogram(s)

GHS08

GHS07

Hazard classification

Acute Tox. 4 : Acute toxicity, Category 4
Eye Dam. 1 : Serious eye damage/irritation, Category 1
Eye Irrit. 2 : Serious eye damage/irritation, Category 2
Repr. 2 : Reproductive toxicity, Category 2

Hazard Statement(s)

H318, Causes serious eye damage.
H302, Harmful if swallowed.
H361d, Suspected of damaging the unborn child.
H319, Causes serious eye irritation.

Precautionary Statement(s)

P101, If medical advice is needed, have product container or label at hand.
P102, Keep out of reach of children
P264, Wash hands/exposed areas thoroughly after handling.
P301+P310, IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P337+P313, If eye irritation persists: Get medical advice/attention.
P305+P351+P338, IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501, Dispose of contents/container to an approved waste disposal plant.

Acronyms

ATE : Acute Toxicity Estimate
CAS : Chemical Abstracts Service

CLP : Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DNEL : Derived No Effect Level
EC : European Community
EINECS : European Inventory of Existing Commercial Chemical Substances
LTEL : Long term exposure limit
PBT : Persistent, Bioaccumulative and Toxic
PNEC : Predicted No Effect Concentration
REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals
STEL : Short term exposure limit
STOT : Specific Target Organ Toxicity
vPvB : very Persistent and very Bioaccumulative

Key literature references and sources for data used to compile the SDS	Regulation (EC) No. 1272/2008 (CLP)
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