



P2AO460-NP-84.0

SAFETY DATA SHEET

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

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

1.1 Product identifier

GHS Product Identifier	Not applicable.
Chemical Name	Not applicable.
Trade name	P2AO460-NP-84.0
CAS No.	Mixture
EINECS No.	Mixture

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

Identified use(s)	Synthetic Bearing Lubricant
Uses advised against	None.

1.3 Details of the supplier of the safety data sheet

Company Identification	Permawick Company 3110 Permawick Drive Columbus, IN, 47201
Telephone	+1 (812) 376-0703
Fax	+1 (812) 372-1410
E-Mail (competent person)	sales@permawick.com
Only Representative	Experien Chemical Services (Europe) Limited PO Box 170 Thirsk YO7 9AN UK
Telephone	+44 7791 573385 (UK 9am to 5pm)

1.4 Emergency telephone number

Emergency Phone No.	Monday - Friday, 8 am – 4:30 p.m. (EST) +1 (812) 376-0703 CHEMTREC 24 hr. +1 (703) 527-3887 (Collect call accepted)
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SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

According to Regulation (EC) No. 1272/2008 (CLP): Aquatic Chronic 3

2.2 Label elements

Hazard pictogram(s)	None
Signal word(s)	None
Hazard statement(s)	Harmful to aquatic life with long lasting effects.
Precautionary statement(s)	Avoid release to the environment.

2.3 Other hazards

Not classified as PBT or vPvB.

2.4 Additional Information

May produce an allergic reaction in persons already sensitised.

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

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

Ingredient(s)	%W/W	EC No. and CAS#	According to Regulation (EC) No. 1272/2008 (CLP)
1-Decene homopolymer, hydrogenated	83 - 85	68037-01-4	R43 Xn; R48/20/21/22 R62 N; R50
tris(methylphenyl) phosphate ^	0 – 1.0	215-548-8 1330-78-5	Repr. 2; H361 Aquatic Acute 1; H400 Aquatic Chronic 1; H410
1-H benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-methyl- ^	0 – 0.1	----- 94270-86-7	Skin Irrit. 2; H315 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 2; H411

^ Not yet subject to REACH registration.

3.3 Additional Information - Substances in the product which may present a health or environmental hazard, or which have been assigned occupational exposure limits, are detailed below. **None**

For full text of H/P phrases see section 16.

SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Inhalation	Unlikely to be required but if necessary treat symptomatically.
Skin Contact	Wash affected skin with soap and water.
Eye Contact	Eyes should be washed with plenty of water. If symptoms occur obtain medical attention.
Ingestion	Unlikely to be required but if necessary treat symptomatically.

4.2 Most important symptoms and effects, both acute and delayed None

4.3 Indication of any immediate medical attention and special treatment needed None

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

-Suitable Extinguishing Media	Extinguish with waterspray, dry chemical, sand or carbon dioxide.
-Unsuitable Extinguishing Media	None anticipated.

5.2 Special hazards arising from the substance or mixture This product may give rise to hazardous fumes in a fire.

5.3 Advice for fire-fighters A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

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|------------|--|--|
| 6.1 | Personal precautions, protective equipment and emergency procedures | Avoid skin contact. Avoid contact with eyes. |
| 6.2 | Environmental precautions | Use appropriate container to avoid environmental contamination. |
| 6.3 | Methods and material for containment and cleaning up | Contain and cover spilled substance with dry sand or earth or other suitable dry material. Transfer to a container for disposal or recovery. |
| 6.4 | Reference to other sections | None |
| 6.5 | Additional Information | None |

SECTION 7: HANDLING AND STORAGE



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|------------|---|--|
| 7.1 | Precautions for safe handling | Avoid skin contact. Avoid contact with eyes. |
| 7.2 | Conditions for safe storage, including any incompatibilities | |
| | -Storage Temperature | Store at room temperature. |
| | -Incompatible materials | Strong oxidising agents. |
| 7.3 | Specific end use(s) | Lubricating agent |

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Control parameters**
- 8.1.1 Occupational exposure limits**

SUBSTANCE.	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m ³)	STEL (ppm)	STEL (mg/m ³)	Note:
None	----	----	----	----	----	

Biological limit value				
Limit value type (country of origin)	SUBSTANCE.	CAS No.	Biological limit value	Note:
None known	----	----	----	----

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|--------------|---|------------------------|
| 8.1.2 | Recommended monitoring method | None |
| 8.2 | Exposure controls | |
| 8.2.1 | Appropriate engineering controls | Not normally required. |
| 8.2.2 | Personal protection equipment | |
| | Eye/face protection | Safety spectacles. |
| |  | |
| | Skin protection (Hand protection/ Other) | Not normally required. |
| |  | |

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Respiratory protection

Not normally required.



Thermal hazards

Not normally required.

8.2.3 Environmental Exposure Controls

Use appropriate container to avoid environmental contamination. Disposal should be in accordance with local, state or national legislation. Consult an accredited waste disposal contractor or the local authority for advice.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Vibrous, smooth.
Colour.	Gray.
Odour	Faint Petroleum-Like
Odour threshold (ppm)	Not available
pH (Value)	Not available
Melting point (°C) / Freezing point (°C)	Not available
Boiling point/boiling range (°C):	Not determined.
Flash point (°C)	230 - 270 [Open cup]
Evaporation rate	Not applicable
Flammability (solid, gas)	Not applicable
Explosive limit ranges	Not applicable
Vapour pressure (Pascal)	< 1
Vapour density (Air=1)	> 1
Density (g/ml) Base oil	0.84
Solubility (Water)	Insoluble.
Solubility (Other)	Not available
Partition coefficient (n-Octanol/water)	Not available
Auto ignition point (°C)	>282
Decomposition temperature (°C)	Not available
Kinematic Viscosity (cSt) @ 40°C	100 (Listed in: Product specification)
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

9.2 Other information

Not available.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Stable under normal conditions.
10.2 Chemical stability	Stable.
10.3 Possibility of hazardous reactions	None anticipated.
10.4 Conditions to avoid	None
10.5 Incompatible materials	Oxidizers
10.6 Hazardous Decomposition Product(s)	Carbon monoxide, Carbon dioxide

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

11.1.1 Substances

Not applicable

11.1.2 Mixtures - By analogy with similar materials:

Acute toxicity	Not available.
Skin corrosion/irritation	Not available.

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Serious eye damage/irritation	Not available.
Respiratory or skin sensitization	Not available.
Germ cell mutagenicity	Not available.
Carcinogenicity	Not available.
Reproductive toxicity	Not available.
STOT - single exposure	Not available.
STOT - repeated exposure	Not available.
Aspiration hazard	Not available.

11.1.3 Substances in preparations / mixtures

1-H benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-methyl- (CAS No.94270-86-7)

Acute toxicity	Ingestion: LD50 3313 mg/kg (rat) Inhalation: No data Dermal: LD50 > 2000 mg/kg (rat)
Skin corrosion/irritation	May cause irritation.
Serious eye damage/irritation	May cause irritation.
Respiratory or skin sensitization	May cause an allergic skin reaction.
Germ cell mutagenicity	Not to be expected.
Carcinogenicity	Not to be expected.
Reproductive toxicity	Not to be expected.
STOT - single exposure	Not to be expected.
STOT - repeated exposure	Not to be expected.
Aspiration hazard	No data

tris(methylphenyl) phosphate (CAS No. 1330-78-5)

Acute toxicity	Ingestion: LD50 > 20,000 mg/kg (rat) Inhalation: LC50 > 11.1 mg/l (rat) (1 hour(s)) Dermal: LD50 3.7 g/kg (rabbit)
Skin corrosion/irritation	Slightly irritant (Skin).
Serious eye damage/irritation	Non-irritant to rabbit eyes.
Respiratory or skin sensitization	It is not a skin sensitiser.
Germ cell mutagenicity	Negative
Carcinogenicity	No data
Reproductive toxicity	Suspected of damaging fertility or the unborn child. LOAEL = 20 mg/kg (Developmental) NOEL = 20 mg/kg (Maternal)
STOT - single exposure	Not to be expected.
STOT - repeated exposure	Not to be expected. Oral: NOAEL = 1000 mg/kg (rat)
Aspiration hazard	No data

11.2 Other information

None known.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity -

Substances in preparations / mixtures

1-H benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-methyl- (CAS No.94270-86-7)

Acute toxicity	Fish: LC50 = 1.3 mg/l (96 hour) (<i>Brachydanio rerio</i>) Aquatic invertebrates: EC50 = 2.05 mg/l (48 hour) (<i>D. magna</i>) Algae: EL50 = 0.976 mg/l (72 hour) (<i>Desmodesmus subspicatus</i>)
Long Term Toxicity	Algae: EC10 = 0.586 mg/l (72 hour) (<i>Desmodesmus subspicatus</i>)

tris(methylphenyl) phosphate (CAS No. 1330-78-5)

Acute toxicity	Fish LC50 = 0.06 mg/l (96 hour) (<i>Rainbow trout</i>) Fish LC50 = 44.8 mg/l (96 hour) (<i>Fathead minnow</i>) Aquatic invertebrates: EC50 = 146 µg/l (48 hour) (<i>D. magna</i>) Algae EL50 > 2500 µg/l (72 hour) / (96 hour) (<i>S. capricornutum</i>)
Long Term	Aquatic invertebrates: NOEC = 0.011 – 0.019 mg/l (Survival) (<i>G. pseudolimnaeus</i>)

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12.2	Persistence and degradability	Not available
12.3	Bioaccumulative potential	Not available
12.4	Mobility in soil	No data
12.5	Results of PBT and vPvB assessment	Not classified as PBT or vPvB.
12.6	Other adverse effects	None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1	Waste treatment methods	Disposal should be in accordance with local, state or national legislation. Consult an accredited waste disposal contractor or the local authority for advice.
13.2	Additional Information	None known.

SECTION 14: TRANSPORT INFORMATION

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN number			
Proper Shipping Name			
Transport hazard class(es)		Not classified as dangerous for transport.	
Packing Group			
Environmental hazards			
Special precautions for user			
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:	Not applicable		

SECTION 15: REGULATORY INFORMATION

15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture:	
15.1.1	EU regulations	Listed
	Regulation (EC) 2037/2000 - Dangerous to the ozone layer.	No.
	Regulation (EC) 850/2004 - Persistent Organic Pollutants	No.
	Regulation (EC) 689/2008 - Export/Import of Dangerous Chemicals	No.
	Regulation (EC) 1907/2006 - REACH Authorisations and/or restrictions on use	No.
15.1.2	National regulations	Not established.
15.2	Chemical Safety Assessment	Not applicable

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

Hazard Statement(s)

- H315: Causes skin irritation.
- H317: May cause an allergic skin reaction.
- H361: Suspected of damaging fertility or the unborn child.
- H400: Very toxic to aquatic life.
- H410: Very toxic to aquatic life with long lasting effects.
- H411: Toxic to aquatic life with long lasting effects.

GHS Classification

- Aquatic Chronic 3: Harmful to aquatic life with long lasting effects.

Training advice: None.

Additional Information: None.

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