



PSL455-NP-84.0

SAFETY DATA SHEET

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

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

- 1.1 Product identifier**
GHS Product Identifier Not applicable.
Chemical Name Not applicable.
Trade name PSL455-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 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 U.S.A.
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) (812) 376-0703
CHEMTREC 24 hr. +1 (703) 527-3887 (Collect call accepted)

SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture**
Regulation (EC) No. 1272/2008 (CLP). Aquatic Chronic 3
- 2.2 Label elements**
Hazard Symbol 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** None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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

Hazardous ingredient(s)	%W/W	EC No. and CAS#	According to Regulation (EC) No. 1272/2008 (CLP)
Fatty acids, C5-10, esters with dipentaerythritol	83 - 85	70983-72-1	no adverse effect observed
Amines, C11-C14 Branched, alkyl, Monohexyl and dihexyl phosphate	0 – 1.0	80939-62-4	Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319
Aromatic amine	0 – 0.1	128-37-0	Causes skin irritation. May cause an allergic skin reaction. Toxic to aquatic life with long lasting effects.

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 the 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.

SECTION 6: ACCIDENTAL RELEASE MEASURES

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

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) Synthetic Lubricant




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 known	-----	-----	-----	-----	-----	-----

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

- 8.1.2 Recommended monitoring method Not available
- 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.

 - Respiratory protection Not normally required.

 - Thermal hazards Not normally required.
- 8.2.3 Environmental Exposure Controls Not normally required.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 Information on basic physical and chemical properties
 - Appearance Granular.
 - Colour Gray to Grayish Yellow
 - Odour Faint Ester-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 - 250 [Open cup]
 - Evaporation rate Not applicable
 - Flammability (solid, gas) Not applicable
 - Explosive limit ranges. Not applicable
 - Vapour Pressure (mm Hg) < 1
 - Vapour Density (Air=1) > 1
 - Density (g/ml) 0.993 – 1.01
 - Solubility (Water) Insoluble.
 - Solubility (Other) Not available
 - Partition Coefficient (n-Octanol/water) Not available
 - Auto Ignition Temperature (°C) >282
 - Decomposition Temperature (°C) Not available
 - Viscosity (mPa.s) (40°C) Base Oil Only 100 (Listed in: Product specification)
 - Explosive properties Not explosive.
 - Oxidising properties Not oxidising.
- 9.2 Other information Not available.



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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	Oral: >5000 mg/kg Dermal: >5000 mg/kg
Skin corrosion/irritation	Unlikely to cause skin irritation.
Serious eye damage/irritation	Unlikely to cause eye irritation.
Respiratory or skin sensitization	Contains: N,N-bis(2-ethylhexyl)-ar-methyl-1H-benzotriazole-1-methanamine. May produce an allergic 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	Not to be expected.

11.1.3 Substances in preparations / mixtures

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

Acute toxicity	Oral LD50 > 20000 mg/kg (rat) Inhalation LC50 > 11.1 mg/l (rat) 1hr Dermal: LD50 = 3700 mg/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	Positive. Suspected of damaging fertility or the unborn child. Testicular Effects. 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	Not applicable

N,N-bis(2-ethylhexyl)-ar-methyl-1H-benzotriazole-1-methanamine (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

11.2 Other information

None known.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity - Substances in preparations / mixtures	
<u>1-H benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-methyl- (CAS No.94270-86-7)</u>	
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>)
<u>tris(methylphenyl) phosphate (CAS No. 1330-78-5)</u>	
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>)
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

	<u>Land transport (ADR/RID)</u>	<u>Sea transport (IMDG)</u>	<u>Air transport (ICAO/IATA)</u>
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.



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Hazard statement(s) and Precautionary statement(s):

- 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.
- H315: Causes skin irritation.
- H317: May cause an allergic skin reaction.
- 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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