



PWS110

SAFETY DATA SHEET

GB 13690-2009 and GB/T 16483-2008

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 PWS110
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
- 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**
GB 13690-2009 Not classified as dangerous for supply/use.
- 2.2 Label elements**
Hazard Symbol None
Signal word(s) None
Hazard statement(s) None
Precautionary statement(s) None
- 2.3 Other hazards** Not classified as PBT or vPvB.
- 2.4 Additional Information** None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

GB 13690-2009:

Hazardous ingredient(s)	%W/W	CAS No.	Hazard statement(s)
Benzamine, N Phenyl-, reaction products with 2,4,4 trimethylpentene	0 - 1	68411-46-1	Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

3.3 Additional Information: None

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	Liquid
Colour	Transparent to Pale yellow
Odour	No odour
Odour Threshold (ppm)	Not available.
pH (Value)	Not applicable.
Melting Point (°C) / Freezing Point (°C)	Not available.
Boiling point/boiling range (°C):	Not available.
Flash Point (°C)	280 - 315 [Cleveland Open cup]
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Explosive limit ranges.	Not applicable.
Vapour Pressure (mm Hg)	Not available.
Vapour Density (Air=1)	Not available.
Density (g/ml)	0.96 - 1.05 (Water = 1)
Solubility (Water)	Not available.
Solubility (Other)	Not available.
Partition Coefficient (n-Octanol/water)	Not available.
Auto Ignition Temperature (°C)	Not available.
Decomposition Temperature (°C)	Not available.
Viscosity (mPa.s) (40°C)	50 - 300
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	Thermal breakdown of this product during fire or very high heat may evolve the following hazardous decomposition products: Carbon oxides, silicone dioxide and traces of formaldehyde.
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

This material is unlikely to present a significant health hazard under normal conditions of handling and use.

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
Irritation / Corrosivity	Unlikely to cause skin irritation. Unlikely to cause eye irritation.
Sensitisation	Not to be expected.
Repeated dose toxicity	Not to be expected.
Carcinogenicity	Not to be expected.
Mutagenicity	Not to be expected.
Toxicity for reproduction	Not to be expected.
11.1.3 Substances in preparations / mixtures	Not classified as dangerous for supply/use.
11.2 Other information	This product can generate traceamounts of formaldehyde at approximately 150°C and above in presence of air. Formaldehyde is a skin and respiratory sensitizer, and potential cancer hazard. Use adequate ventilation when this product is heated above 150°C in the presence of air.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity	
Substances in preparations / mixtures	
<u>Benzamine, N Phenyl-, reaction products with 2,4,4 trimethylpentene (CAS No. 68411-46-1)</u>	
Short term	LC50 (96 hour) > 100 mg/L (<i>Danio rerio</i>) EC50 (48 hour) = 51 mg/L (<i>Daphnia magna</i>) EC50 (72 hour) > 100 mg/L (<i>Desmodesmus subspicatus</i>)
Long Term	No data - Not readily biodegradable.
12.2 Persistence and degradability	There is evidence of degradation in soil and water.
12.3 Bioaccumulative potential	The substance has low potential for bioaccumulation.
12.4 Mobility in soil	The product has low mobility in soil.
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</u>	<u>Sea transport (IMDG)</u>	<u>Air transport (ICAO/IATA)</u>
UN number			
Proper Shipping Name		Not classified as dangerous for transport.	
Transport hazard class(es)			
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:

Inventory Status: China (IECSC)	All chemicals listed
Catalog of Hazardous Chemicals in China (2002):	None

SECTION 16: OTHER INFORMATION

Additional Information: None
The following sections contain revisions or new statements: 1-16.

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