



PHC 406-HH-84.5

SAFETY DATA SHEET

OSHA HCS (29 CFR 1910.1200)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Chemical Name Not applicable
Trade name PHC406-HH-84.5
CAS No. Mixture
EINECS No. Mixture

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

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

Details of the supplier of the safety data sheet

Company Identification Permawick Company
3110 Permawick Drive
Colombus, IN, 47201
Telephone (812) 376-0703
Fax (812) 372-1410
E-Mail (competent person) sales@permawick.com

Emergency telephone number

Emergency Phone No. Monday - Friday, 8 am – 4:30 p.m. (EST) (812) 376-0703
CHEMTREC 24 hr. (800)424-9300

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

OSHA HCS (29 CFR 1910.1200) Aquatic Chronic 3

Label elements

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

Other hazards

Not classified as PBT or vPvB.

Additional Information

May produce an allergic reaction in persons already sensitised.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous ingredient(s)	%W/W	CAS No.	Hazard statement(s)
tris(methylphenyl) phosphate	0 – 1.0	1330-78-5	Repr. 2 Aquatic Acute 1 Aquatic Chronic 1
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.

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

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SECTION 4: FIRST AID MEASURES



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.
Most important symptoms and effects, both acute and delayed	None
Indication of the immediate medical attention and special treatment needed	None

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media

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

Special hazards arising from the substance or mixture

This product may give rise to hazardous fumes in a fire.

Advice for fire-fighters

A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid skin contact. Avoid contact with eyes.

Environmental precautions

Use appropriate container to avoid environmental contamination.

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.

Reference to other sections

None

Additional Information

None

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Avoid skin contact. Avoid contact with eyes.

Conditions for safe storage, including any incompatibilities

-Storage Temperature	Store at room temperature.
-Incompatible materials	Strong oxidising agents.

Specific end use(s)

Lubricating agent

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational Exposure Limits

SUBSTANCE.	CAS No.	LTEL (8 hr TWA ppm)		STEL (ppm)		Note:
		PEL (OSHA)	TLV (ACGIH)	PEL (OSHA)	TLV (ACGIH)	
None	----	----	----	----	----	

Recommended monitoring method

None

Exposure controls

Appropriate engineering controls

Not normally required.

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.

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

Information on basic physical and chemical properties

Appearance	Granular.
Colour	White to Straw Yellow
Odour	Mild petroleum
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 of oil (g/ml)	0.82 – 0.85
Solubility (Water)	Insoluble.
Solubility (Other)	Not available

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Partition Coefficient (n-Octanol/water)	Not available
Auto Ignition Temperature (°C)	>282
Decomposition Temperature (°C)	Not available
Kinematic Viscosity (cSt) @ 40°C (Base Oil)	76 (Listed in: Product specification)
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
Other information	Not available

SECTION 10: STABILITY AND REACTIVITY

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

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Aromatic amine

Acute toxicity	
-Ingestion	1231mg/Kg Mouse
-Inhalation	No data
-Dermal	No data
-Irritation	May cause irritation.
Sensitisation	Sensitizer
Repeated dose toxicity	No data
Mutagenicity	No data
Carcinogenicity	No data
Toxicity for reproduction	No data

Other information

IARC, NTP, OSHA, ACGIH do not list this product or any components thereof as known or suspected carcinogen.

11.1 Information on toxicological effects

11.1.1 Substances

Not applicable

11.1.2 Mixtures

Acute toxicity	Not available.
Irritation	Not available.
Corrosivity	Not available.
Sensitisation	Not available.
Repeated dose toxicity	Not available.
Carcinogenicity	Not available.
Mutagenicity	Not available.
Toxicity for reproduction	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	No data
-Inhalation	No data
-Dermal	No data
-Irritation	May cause irritation.
Sensitisation	Sensitizer
Repeated dose toxicity	No data

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Mutagenicity	No data
Carcinogenicity	No data
Toxicity for reproduction	No data
<u>tris(methylphenyl) phosphate (CAS No. 1330-78-5)</u>	
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)
-Irritation	Slightly irritant (Skin). Non-irritant to rabbit eyes.
Sensitisation	It is not a skin sensitiser.
Repeated dose toxicity	Oral: NOAEL = 1000 mg/kg (rat)
Mutagenicity	Negative
Carcinogenicity	No data
Toxicity for reproduction	Positive
Developmental Toxicity	LOAEL = 20 mg/kg (Developmental) NOEL = 20 mg/kg (Maternal)
11.2 Other information	None known.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Aromatic amine	
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	Fish Sublethal Effects = 0.9 mg/l (4 week(s)) (<i>O. mykiss</i>)
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	No data
Long Term Toxicity	No data
<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	Fish Sublethal Effects = 0.9 mg/l (4 week(s)) (<i>O. mykiss</i>) 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.

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SECTION 13: DISPOSAL CONSIDERATIONS

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.

Additional Information

None known.

SECTION 14: TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

Not classified as dangerous for transport.

UN number
Proper Shipping Name
Transport hazard class(es)
Packing Group
Marine Pollutant
Special precautions for user

Land transport (ADR/RID)

Not classified as dangerous for transport.

UN number
Proper Shipping Name
Transport hazard class(es)
Packing Group
Marine Pollutant
Special precautions for user

Sea transport (IMDG)

Not classified as dangerous for transport.

UN number
Proper Shipping Name
Transport hazard class(es)
Packing Group
Environmental hazards
Special precautions for user

Air transport (ICAO/IATA)

Not classified as dangerous for transport.

UN number
Proper Shipping Name
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 established

SECTION 15: REGULATORY INFORMATION

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

TSCA (Toxic Substance Control Act) - Inventory Status: All components listed or polymer exempt.

Designated Hazardous Substances and Reportable Quantities (40 CFR 302.4):

Chemical Name	CAS No.	Typical %wt.	RQ (Pounds)
None	----	----	----

SARA 311/312 - Hazard Categories:

Fire Sudden Release Reactivity Immediate (acute) Chronic (delayed)

SARA 313 - Toxic Chemicals (40 CFR 372):

Chemical Name	CAS No.	Typical %wt.
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None	----	----
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SARA 302 - Extremely Hazardous Substances(40 CFR 355):

Chemical Name	CAS No.	Typical %wt.	TPQ (pounds)
None	----	----	----

SECTION 16: OTHER INFORMATION

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

Date of preparation: April 15, 2013

Additional Information: None.

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