



# ISO 5 Oil

## SAFETY DATA SHEET

OSHA HCS (29 CFR 1910.1200)

### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

#### Product identifier

Chemical Name Not applicable  
Trade name ISO 5 Oil  
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

None known.

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous ingredient(s)	%W/W	CAS No.	Hazard statement(s)
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	0 – 1.5	68411-46-1	May cause damage to organs through prolonged or repeated exposure. Harmful to aquatic life with long lasting effects.
Phenol, isobutyleneated, phosphate [Triphenyl phosphate ≥ 2.5 < 25%]	1.9-2.2	68937-40-6	Suspected of damaging fertility or the unborn child. Very toxic to aquatic life. Very 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

## 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

## 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	Viscous liquid.
Colour	Amber, Clear.
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)	200 [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)	0.830



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Solubility (Water)	Insoluble.
Solubility (Other)	Not available
Partition Coefficient (n-Octanol/water)	Not available
Auto Ignition Temperature (°C)	>282
Decomposition Temperature (°C)	Not available
Kinematic Viscosity (cSt) @ 40°C	4.3 (Listed in: Product specification)
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
<b>Other information</b>	Not available

## SECTION 10: STABILITY AND REACTIVITY

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

## SECTION 11: TOXICOLOGICAL INFORMATION

### Information on toxicological effects

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene (CAS No. 68411-46-1)

#### Acute toxicity

-Ingestion	LD50 > 5000 mg/kg (rat)
-Inhalation	No data
-Dermal	LD50 > 2000 mg/kg (rat)
-Irritation	Slightly irritant (Skin). Non-irritant to rabbit eyes.

#### Sensitisation

It is not a skin sensitiser.

#### Repeated dose toxicity

No data

#### Mutagenicity

Negative

#### Carcinogenicity

No data

#### Toxicity for reproduction

NOAEL = 125 mg/kg (P/F1) (rat)

#### Other information

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

Phenol, isobutyleneated, phosphate (CAS 68937-40-6)

#### Acute toxicity

-Ingestion	LD50 > 20,000 mg/kg (rat)
-Inhalation	LC50 > 200 mg/l (rat) (1 hour(s))
-Dermal	LD50 2000 mg/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)

#### Other information

None known

## SECTION 12: ECOLOGICAL INFORMATION

### Toxicity

Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene (CAS No. 68411-46-1)



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## Acute toxicity

Fish LC50 > 100 mg/l (96 hour) (*D. rerio*)  
Aquatic invertebrates: EC50 > 100 mg/l (48 hour) / (24 hour(s)) (*D. magna*)

## Long Term

Algae EC50 > 100 mg/l (72 hour) (*D. subspicatus*)  
(Growth rate) and (Biomass)

No data

Phenol, isobutyleneated, phosphate (CAS 68937-40-6)

## Acute toxicity

Fish LC50 = 3.4 mg/l (96 hour) (*Rainbow trout*)  
Fish LC50 = 42.3mg/l (96 hour) (*Fathead minnow*)

EC50 (*Daphnia magna* (Water flea)): 3.9 mg/l  
Exposure time: 48 h  
Remarks: Information given is based on data obtained from similar substances.

EC50 (*Daphnia magna* (Water flea)): 3.9 mg/l  
Exposure time: 48 h  
Remarks: Information given is based on data obtained from similar substances.

## Long Term

Fish Sublethal Effects = 0.9 mg/l (4 week(s)) (*O. mykiss*)  
Aquatic invertebrates: NOEC = 0.011 – 0.019 mg/l (Survival) (*G. pseudolimnaeus*)

## Persistence and degradability

Not available

## Bioaccumulative potential

Not available

## Mobility in soil

No data

## Results of PBT and vPvB assessment

Not classified as PBT or vPvB.

## Other adverse effects

None known.

## 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

UN number

### 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)



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Packing Group  
Environmental hazards  
Special precautions for user

**Air transport (ICAO/IATA)**  
UN number  
Proper Shipping Name  
Transport hazard class(es)  
Packing Group  
Environmental hazards  
Special precautions for user

Not classified as dangerous for transport.

**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.
None	----	----

**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 16, 2013

**Additional Information:** None.

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