

## SAFETY DATA SHEET

**Item Code: T0118**

Section 1.	Identification of the material and the supplier
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Item Code:	T0118
Product:	TKO Refrigeration Oil Test Kit
Product Use:	Refrigerator Oil Test Kit
New Zealand Supplier:	Realcold Ltd
Address:	9 Prescott Street Penrose, Auckland
Telephone:	09 526 5700
Fax Number:	09 526 5721
<b>Emergency Telephone:</b>	<b>09 526 5700</b> <b>0800 766 764 (National Poison Centre)</b>
Manufacturer:	Parker Hannifin, 9 Carrington Road, Castle Hill, Australia
Date of MSDS Preparation:	14 March 2017 – ver 2

Section 2.	Hazards Identification
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**This substance is hazardous according to the *HSNO (Minimum Degrees of Hazard) Regulations 2001***

**Group Standard & ERMA Approval Code: Laboratory Chemicals and Reagent Kits – HSR002596**

**Pictograms**



Flammable



Toxic



Chronic

HSNO Class.	Hazard Code	Hazard Statement	EU Risk Phrases
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3.1B	H225	Highly flammable liquid and vapour.	R11
6.1D (oral)	H302	Harmful if swallowed.	R22
6.3A	H315	Causes skin irritation.	R38
6.4Ag (mild irritant)	H320	Causes eye irritation.	R36
6.8B	H361	Suspected of damaging fertility or the unborn child	R62/R63
6.9B (Single exposure)	H371	May cause damage to organs	R65
9.1D	H402	Harmful to aquatic life.	R53
9.3C	H433	Harmful to terrestrial vertebrates.	No equivalent

**Prevention Code      Prevention Statement**

P102	Keep out of reach of children.
P103	Read label before use.
P104	Read safety data sheet before use
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from sparks. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof ventilation
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe fumes.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective clothing as stated in section 8.
P281	Use personal protective equipment as required.

**Response Code      Response Statement**

P101	If medical advice is needed, have product container or label at hand.
P330	Rinse mouth.
P331	Do NOT induce vomiting.
P362	Take off contaminated clothing and wash before re-use.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P303 + P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P309 + P311	IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P370 + P378	In case of fire: Use ... <specify appropriate media> for extinction. – This statement applies if water increases risk.

**Storage Code      Storage Statement**

P405	Store locked up.
P403 + P235	Store in a well-ventilated place. Keep cool.

**Section 3.      Composition / Information on Ingredients**

<b>Ingredients</b>	<b>Wt%</b>	<b>CAS NUMBER.</b>
Toluene	>50%	108-88-3
Ethyl Alcohol	>5%	64-17-5
Non Hazardous Ingredients to balance	To balance	

#### **Section 4. First Aid Measures**

Routes of Exposure:

If in Eyes	Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Call a physician immediately.
If on Skin	Remove contaminated clothing and wash skin with warm soapy water. Do not scrub. If swelling, redness, blistering or irritation occurs, get medical assistance
If Swallowed	If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.
If Inhaled	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Get medical advice if breathing becomes difficult.

#### **Section 5. Fire Fighting Measures**

<b>Hazard Type</b>	Flammable Liquid and vapour
<b>Hazards from decomposition products</b>	Vapour/air mixtures may ignite explosively. Flashback along the vapour trail may occur. Run off to sewer may create fire or explosive hazard
<b>Suitable Extinguishing media</b>	Use foam, dry agents (carbon dioxide, dry chemical powder). Do not use waterjet
<b>Precautions for firefighters and special protective clothing</b>	Firefighters should wear full protective clothing and self contained breathing apparatus (SCBA) operated in positive pressure mode. In case of fire the product may be violently or explosively reactive. Use water spray to disperse vapours. This product should be prevented from entering drains and watercourses.
<b>HAZCHEM CODE</b>	<b>3YE</b>

#### **Section 6. Accidental Release Measures**

Wear appropriate personal protective equipment and clothing to prevent exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unprotected personnel. If possible contain the spill. Place inert absorbent, non combustible material onto spillage. Use clean non-sparking tools to collect the material and place into suitable labeled containers for subsequent recycling or disposal. Dispose of waste according to the local regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

#### **Section 7. Handling and Storage**

**Handling** Wear appropriate protective clothing and equipment to prevent inhalation, skin and eye exposure. Handle and use the material in a well-ventilated area, away from sparks, flames and other ignition sources. Have emergency equipment (for fires, spills, leaks, etc) readily available. Work from suitable, labelled, fire-resistant containers. Open containers carefully as they may be under pressure. Keep containers closed when not in use. Flameproof equipment is necessary in areas where the product is being

used. Take precautionary measures against static discharges. Earth or bond all equipment. Do not empty into drains. Ensure a high level of personal hygiene is maintained when using this product, that is, always wash hands before eating, drinking, smoking or using the toilet facilities.

**Storage**

Store in cool, dry, well-ventilated area out of direct sunlight away from sources of ignitions, oxidising agents, strong acids, strong bases, foodstuffs, and clothing. Keep containers closed when not in use and securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Have appropriate fire extinguishers available in and near the storage area. Take precautions against static electricity discharges. Use proper grounding procedures.

**Section 8 Exposure Controls / Personal Protection**

**WORKPLACE EXPOSURE STANDARDS (provided for guidance only)**

Substance	CAS #	TWA		STEL	
		ppm	mg/m3	ppm	mg/m3
Toluene	108-88-3	50	191	150	574
Ethyl alcohol	64-17-5	1000	1880	-	-

Workplace Exposure Standard – Time Weighted Average (WES-TWA). *The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure.* Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). *The 15-minute average exposure standard.* Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply.

**Engineering Controls**

Provide sufficient ventilation to keep airborne levels below the exposure limits. Where vapours or mists are generated, particularly in enclosed areas, and natural ventilation is inadequate, a flameproof exhaust ventilation system is required.

**Personal Protection**

**Respiratory**

if engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable organic vapour filter should be used. Reference should be made to Australian/ New Zealand standards AS/NZS 1716, Use and Maintenance of Respiratory Protective Devices in order to make changes for individual circumstances.

**Eye Protection**

Safety glasses with side shields, goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances i.e methods of handling or engineering controls and according to risk assessments undertaken. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 – Eye Protectors for Industrial Applications.

**Hand Protection**

Wear gloves of impervious material. Final choice of appropriate gloves will vary according to individual circumstances i.e. Methods of handling or according to risk assessments undertaken. Reference should be made to AS/NZS 2161.1: Occupational protective gloves – Selection, use and maintenance.

**Body Protection** Suitable protective work wear, e.g. imperious, antistatic overalls buttoned at neck and wrist is recommend. Chemical resistant apron is recommended where large quantities are handled.

## Section 9 Physical and Chemical Properties

<b>Appearance</b>	Clear Liquid
<b>Odour</b>	Solvent odour
<b>Flash Point</b>	4.4°C
<b>Boiling Point</b>	78°C
<b>Lower &amp; Upper Flammability Limits</b>	1.4% – 7.0% v/v
<b>Auto-ignition Temperature</b>	Not available
<b>Vapour Density (Air=1)</b>	1.6
<b>Vapour Pressure</b>	19 mmHg
<b>Specific Gravity</b>	0.86 (water = 1)
<b>Solubility in Water</b>	Partially
<b>Evaporation Rate (BuAc=1)</b>	<1

## Section 10. Stability and Reactivity

<b>Stability of Substance</b>	Stable under normal conditions of storage and handling
<b>Conditions to Avoid</b>	Direct sunlight and sources of ignition
<b>Incompatible Materials</b>	Oxidising agents
<b>Hazardous Decomposition Products</b>	Decomposition may lead to the release of toxic and/or Irritating fumes including oxides of carbon

## Section 11 Toxicological Information

Toluene [Cas No 108-88-3] LD50 (oral) rat: = 636 mg/kg

**Inhalation:** Inhalation of product vapours may cause irritation of the nose, Throat and respiratory system.

**Ingestion:** Harmful – may cause lung damage if swallowed. Small amounts of liquid aspirated into the respiratory systems during ingestion or from vomiting May cause severe pulmonary injury that may lead to death. May cause Irritation to the mouth, throat, oesophagus and stomach with symptoms of nausea, abdominal discomfort, vomiting and diarrhoea.

**Skin:** Irritating to skin. Skin contact will cause redness, itching and swelling. Repeated exposure may cause skin dryness and cracking and may lead to dermatitis.

**Eye:** May be irritating to eyes. The symptoms may include redness, itching and tearing.

**Chronic Effects:** Harmful: danger of serious damage to health by prolonged exposure Inhalation. Prolonged or repeated skin and dermatitis. Prolonged inhalation may cause central nervous system depression with symptoms Including dizziness, drowsiness, nausea and headaches. Chronic exposure may have adverse effects on the central nervous system, liver and kidneys.

**Reproductive Toxicity** Possible risk of harm to the unborn child. This product is classified by

NOHSC as Toxic to reproduction Category 3: substances that cause concern for humans owing to possible developmental toxicity effects.

## Section 12. Ecotoxicological Information

No ecological data available for this material. The available ecological dates for the ingredients are as follows:

Toluene: 1180 mg/L 96 hrs / sunfish / TLm / fresh water  
Ethyl alcohol: 250 ppm/ 6 hrs/ goldfish/ TLm / fresh water

## Section 13. Disposal Considerations

Dispose of waste according to local regulations. Labels should not be removed from containers until they have been cleaned. Do not cut, puncture or weld on or near containers. Empty containers may contain hazardous residues. Contaminated containers must not be treated as household waste. Containers should be cleaned by appropriate methods and then re-used or disposed of by landfill or incineration as appropriate. Do not incinerate closed containers. Advise flammable nature.

## Section 14 Transport Information

Classified as a Dangerous Good for transport in NZ ; NZS 5433:2007

### Road and Rail Transport

UN No: 1993  
Class-primary 3  
Packing Group II  
Proper Shipping Name: Flammable Liquid, N.O.S – (contains Toluene and Ethyl alcohol)

### Air Transport

UN No: 1993  
Class-primary 3  
Packing Group II  
Proper Shipping Name: Flammable Liquid, N.O.S – (contains Toluene and Ethyl alcohol)

### Marine Transport

UN No: 1993  
Class-primary 3  
Packing Group II  
Proper Shipping Name: Flammable Liquid, N.O.S – (contains Toluene and Ethyl alcohol)

## Section 15 Regulatory Information

ERMA Approval Code & Group Standard: **Laboratory Chemicals and Reagent Kits – HSR002596**

HSNO Classification: 3.1B, 6.1D, 6.3A, 6.4A, 6.8B, 6.9B, 9.1D, 9.3C

HSNO Controls:

Trigger quantities for this substance:

	<b>Trigger Quantity</b>
Approved Handler	250L $\geq$ if container $\geq$ 5L 500L $\geq$ if container $\leq$ 5L
Location Certificate	100L (>5L), 250L (<5L); 50L open.
Tracking Trigger Quantities	Not applicable
Signage Trigger Quantities	250L
Emergency Response Plan trigger Quantities	1000L

## **Section 16 Other Information**

1. HSNO Approved Code of Practice: Preparation of Safety Data Sheets, September 2006.

### Disclaimer

This document has been issued by Realcold Limited and serves as their Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to Realcold Limited or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While Realcold Limited have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, Realcold Limited accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS

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Please contact the New Zealand distributor, Realcold Ltd, if further information is required.

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