



## MATERIAL SAFETY DATA SHEET

### 1 . Chemical & Company Identification

Trade name :	KZN Super Two Stroke Oil
Supplier :	KZN Oils 45 North Coast Road, Durban, South Africa
Routine inquiries :	+27 31 570 0550
Fax :	+27 31 570 0522
Email :	<a href="mailto:info@kznoils.co.za">info@kznoils.co.za</a>
Chemical Description :	Two Stroke Oil

### 2. Composition & Ingredients

Components	Range in %
Highly Refined Mineral Oil	70-90
Distillates ,Hydrotreated Light	7-13

### 3. Hazards Identification

Warning statements:	NO SIGNIFICANT HAZARD.
<b>Eyes:</b>	Expected to cause no more than minor eye irritation characterized by tearing or a burning sensation.
<b>Oral:</b>	If more than several mouthfuls are swallowed, abdominal discomfort, nausea, and diarrhea may occur.
<b>Inhalation:</b>	Not expected to be harmful if inhaled .Contains petroleum based mineral. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.
<b>Skin:</b>	Contact with the skin is not expected to cause prolonged or significant irritation. Not expected to be harmful to internal organs if absorbed through the skin. May cause skin discolouration following prolonged or repeated contact.

### 4. First Aid Measure

<b>Eyes:</b>	Flush eyes immediately with fresh water for at least 15 minutes while holding the eyelids open. If irritation persists, see a doctor.
<b>Skin:</b>	Wash skin thoroughly with soap and water. Launder contaminated clothing. If skin irritation persists or a rash develops as a result of excessive contact, see a doctor.
<b>Ingestion:</b>	DO NOT make person vomit except on advice of medical personnel. If advice cannot be obtained, take person with container and label to nearest emergency treatment center. Never give anything by mouth to an unconscious person.
<b>Inhalation:</b>	If respiratory irritation or any signs or symptoms as described in this MSDS occur, move the person to fresh air. If any of these effects continue, see a doctor.



## 5. Fire Fighting Measures

<b>Ignition temp. (degrees c):</b>	Not Determined
<b>Flammable limits (% by volume):</b>	Not Determined
<b>Flash point (degrees c):</b>	> 70 Deg C (COC)
<b>Fire extinguishing agents:</b>	According to the National Fire Protection Association Guide, use water fog, dry chemical, foam, or carbon dioxide.
<b>Explosion hazards:</b>	For fires involving this material, do not enter any enclosed or confined space without self-contained breathing apparatus to protect against the hazardous effects of combustion products or oxygen deficiency.

## 6. Accidental Release Measures

<b>In case of spill:</b>	Stop the source of the leak or release and contain spill if possible. Ventilate area. Use respirator and protective clothing as discussed in this MSDS. Contain release to prevent further contamination of soil, surface water or ground water. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal protection. Use appropriate techniques such as applying non combustible absorbent materials or pumping. All equipment used when handling the product must be grounded. A vapor suppressing foam may be used to reduce vapors. Use clean non-sparking tools to collect absorbed material. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. Report spills to local authorities as appropriate or required.
--------------------------	---

## 7. Handling & Storage

<p>Liquid evaporates and forms vapor (fumes) which can catch fire and burn with explosive force. Invisible vapor spreads easily and can be set on fire by many sources such as pilot lights, welding equipment, and electrical motors and switches. Fire hazard is greater as liquid temperature rises above 29 Deg C. Keep out of the reach of children.</p> <p>Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.</p> <p>Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and or flammable atmosphere.</p> <p>General Storage Information: DO NOT USE OR STORE near heat, sparks, flames or hot surfaces. USE AND STORE ONLY IN WELL VENTILATED AREA. Keep container closed when not in use.</p> <p>Container Warnings: container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue and can be dangerous. Do not pressurize .cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition .They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum re-conditioner or dispose of properly.</p> <p>Misuse of empty containers can be hazardous. DO NOT cut, weld, heat or drill container. Residue may ignite with explosive violence if heated sufficiently. Do not pressurize or expose to open flame or heat. Keep container closed and drum bungs in place.</p>
---



## 8. Exposure Control / Personal Protection

<b>Eyes:</b>	No special eye protection is usually necessary. Safety glasses, chemical type goggles, or face shield appropriate where splashing or misting is expected during routine operations or spill clean-up.
<b>Skin:</b>	Exposed employees should exercise reasonable personal cleanliness; this includes cleansing exposed skin several times daily with soap and water, and laundering or dry cleaning soiled work clothing at least weekly.
<b>Inhalation:</b>	Respiratory protection is normally not required. However, if operating conditions create airborne concentrations that are excessive and may exceed the recommended exposure standard(s), the use of an approved respirator is recommended. Wear approved respiratory protection such as a toxic dust, mist and fume respirator.
<b>Ventilation:</b>	Use adequate ventilation to keep the airborne concentrations of this material below the ACGIH TLV for mineral oil mists. Local exhaust ventilation and/or enclosure of the process is preferred in these cases.
<b>Exposure limits:</b>	The ACGIH TLV for mineral oil mists is 200 mg/m <sup>3</sup> for a daily 8-hour exposure. A short term exposure limit (STEL) of 10 mg/m <sup>3</sup> is recommended. Notation-Skin A3 Total hydrocarbon vapor.

## 9. Physical & Chemical Properties

**Note:** The following data may represent a range of approximate or typical values for products in the same family. Precise technical information is provided in Product Bulletins and can be obtained from your Marketing Representative.

<b>Appearance &amp; odor:</b>	Blue
<b>Boiling point (deg. c):</b>	>204 Deg C
<b>Vapor pr. (mmhg @ 25 deg. c):</b>	<0.2 mmHG@37.8 Deg C.
<b>Density (kg/l at 15 deg. c):</b>	0.85 - 0.95
<b>Vapor density (air = 1):</b>	> 1
<b>ph of undiluted product:</b>	Not Applicable
<b>Solubility:</b>	Soluble in hydrocarbons
<b>Percent volatile by volume:</b>	Not Determined
<b>Viscosity:</b>	8 mm <sup>2</sup> /sec@100 Deg C

## 10. Stability & Reactivity

<b>Chemical Stability :</b>	This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
<b>Incompatibility with Other Materials :</b>	May react with strong acids or strong oxidizing agents ,such as chlorates,nitrates,peroxides,etc
<b>Hazardous Polymerization:</b>	Hazardous polymerization will not occur.



## 11. Toxicological Information

<p>This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, hydrocracking and hydrotreating.</p> <p>High-Pressure Equipment Information: Accidental high-velocity injection under the skin of materials of this type may result in serious injury. Seek medical attention at once should an accident like this occur. The initial wound at the injection site may not appear to be serious at first; but, if left untreated, could result in disfigurement or amputation of the affected part. Take this information with you if you seek medical treatment.</p> <p>During use in engines, contamination of oil with low levels of cancer –causing combustion product occurs. Used motor oils have been shown to cause skin cancer in mice following repeated application and continuous exposure. Brief or intermittent skin contact with used motor oil is not expected to have serious effects in humans if the oil is thoroughly removed by washing with soap and water</p>
---

## 12. Ecological Information

<b>Environmental effects:</b>	No specific ecotoxicity data on this product are available. This material may present environmental risks common to oil spills. This material is not expected to be readily biodegradable.
-------------------------------	--

## 13. Disposal Considerations

<b>Waste disposal:</b>	Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. Contact local environmental or health authorities for approved disposal of this material.
<b>Remarks:</b>	This material may present environmental risks common to oil spills. Contact your local oil spill response group and applicable government agencies if a spill occurs.

## 14. Transport Information

<b>Transport of dangerous goods:</b>	The description shown may not apply to all shipping situations. Consult appropriate Dangerous Goods Regulations.
<b>DOT Shipping Description:</b>	Petroleum Products ,NOS Combustible Liquid, UN 1268,III
<b>IMO/IMDG Shipping Description:</b>	Petroleum Lubricating Oil, Not regulated as Dangerous Goods for Transport under the IMDG Code.

## 15. Regulatory Information

<b>Respirator information:</b>	Where local approval authority is absent, respirator users can refer to U.S. NIOSH, European Standard EU-149, or joint Australia-New Zealand AS/NZS 1715/1716 for guidance.
<b>EU Risk and Safety Phrases:</b>	R10:Flammable S51:Use only in well –ventilated areas
<b>WHMIS CLASSIFICATION:</b>	Class B,Division 3:Combustible Liquids



## 16. Other Information

Label Category :Engine Oil I,Combustible I  
ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:  
TLV-Threshold Limit Value  
STEL-Short term exposure limit  
ACGIH-American Conference of government industrialists hygienists.  
DOT-Department of Transport (USA)  
IARC-International Agency for Research on Cancer  
TWA-Time weighted Average  
PEL-Permissible Exposure Limit  
CAS-Chemical Abstract Service number  
IMO/IMDG-International Maritime Dangerous Goods Code  
NFPA-National Fire Protection Association  
NTP-National Toxicology program  
OSHA-Occupational Safety and health Administration

To the best of our knowledge, the information provided in this MSDS document is correct. Access to this information is being provided via the Internet so that it can be made available to as many potential users as possible. We do not assume any liability for consequences of the use of this information since it may be applied under conditions beyond our control or knowledge. Also, it is possible that additional data could be made available after this MSDS was issued. Certain hazards are described herein, however these may not be the only hazards that exist. All materials may present unknown hazards and should be used with caution. Customers are encouraged to review this information, follow precautions, and comply with all applicable laws and regulations regarding the use and disposal of this product. For specific technical data or advice concerning this product as supplied in your country please contact your local sales representative. The final determination of the suitability of any material is the sole responsibility of the user.

Revision Date: July 2009