

MATERIAL SAFETY DATA SHEET

AXIAL RADIAL PUMP OIL - 4.5 oz - AR64545

CRANKCASE PUMP OIL

IDENTIFICATION OF THE SUBSTANCE OR PREPARATION:	(75W-90) Special Crankshaft lubricant
COMPANY IDENTIFICATION:	A.R. North America
ADDRESS:	140 - 81st Avenue NE Fridley, MN 55432
COMPONENTS:	Synthetic base stock. Additives.
IMPORTANT HAZARDS:	This product is of low oral and dermal toxicity and under normal conditions of use should present no significant health hazards. However, in common with most mineral oils, prolonged and repeated skin contact may cause dermatitis. Handling precautions must be strictly observed.
GENERAL INFORMATION:	Any substance, in case of accidents involving pressurized circuits and the like, may be accidentally injected under the skin, even without external damage. In such a case, the victim should be brought to a hospital as soon as possible, to get specialized medical treatment.

FIRST-AID MEASURES:

SKIN CONTACT:	Take off contaminated clothing and shoes. Wash thoroughly with soap and water.
EYE CONTACT:	Flush with large amounts of water; if irritation persists, seek medical attention.
INGESTION:	Do not induce vomiting to avoid aspiration into the lungs; seek medical attention.
ASPIRATION OF LIQUID INTO THE LUNGS:	If there is the possibility that the product has been aspirated into the lungs (i.e. in case of spontaneous vomiting), transport the victim to a hospital.
INHALATION:	In case of exposure to a high concentration of vapors, remove the victim from exposure; keep at rest; if necessary, seek medical attention.

FIRE-FIGHTING MEASURES:

SUITABLE:	Carbon dioxide, dry chemicals, foam, water spray (fog).
NOT TO BE USED:	Do not use water jets.
OTHER INFORMATION:	Spilled product which is not burning should be covered with sand or foam. Use water sprays to cool the surfaces exposed to the flames.
SPECIAL PROTECTIVE EQUIPMENT:	Wear a suitable breathing apparatus if smoke is present.
USEFUL PRECAUTIONS:	Avoid accidental sprays on hot surfaces or electrical contacts. In case of losses from pressurized circuits, the sprays may form mists. Take into account that in this case the lower explosion limit for mists is about 45 g/m ³ air.

ACCIDENTAL RELEASE MEASURES:

GENERAL MEASURES:	Shut off source of spill, if possible.
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METHODS FOR CLEANING UP:

ON SOIL:	Contain spilled liquid with sand, earth or other suitable absorbents. Recover free liquid. Clean contaminated area. Dispose of according to local regulations.
ON WATER:	Confine the spillage. Remove from surface by skimming or suitable absorbents. Notify local authorities according to regulations.

HANDLING AND STORAGE:

STORAGE:	Storage temperature: ambient to 65° C max.
HANDLING:	Store the product in cool, well ventilated surroundings. Keep away from sources of ignition.

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PERSONAL PROTECTION:

OPEN SPACES:	No special measures.
CONFINED SPACES:	Aspirators in case of oil mist; protective shields, in case of oil splashes.
HAND/EYES/SKIN PROTECTION:	Mineral oil resistant gloves, overalls. Gloves must be felt-lined.
HYGIENE MEASURES:	Do not drink, eat or smoke with dirty hands. Wash hands before going to the toilet. Do not clean hands with dirty or soil-soaked rags. Change clothes if they are dirty or soaked, and in any case at the end of the working shift. Wash hands with water and soap, do not use solvents or other irritant products which have a defatting effect on the skin.

PHYSICAL AND CHEMICAL PROPERTIES (TYPICAL VALUES).

APPEARANCE:	Liquid, bright & clear (ASTM D 4176/1)
ODOR:	Characteristic.
COLOR:	Not determined (ASTM D 1500)
DENSITY AT 15° C:	870 kg/m ³ (ASTM D 1298)
BOILING POINT/RANGE:	>200° C (at 10 mmHg) (ASTM D 1160)
VAPOR PRESSURE:	1-10-3 hPa (20° C)
VISCOSITY AT 100° C:	13,8 mm ² /s (ASTM D 445)
SOLUBILITY IN WATER:	Insoluble in water
pH:	Not applicable (ASTM D 1287)
POUR POINT:	-39° C (ASTM D 97)
FLASH POINT:	200° C (ASTM D 92)
AUTO-IGNITION TEMPERATURE:	>300° C (DIN 51794)

EXPLOSION LIMITS:

LOWER:	Not determined.
UPPER:	Not determined.
PARTITION COEFFICIENT (P o/w):	Not determined.

STABILITY AND REACTIVITY:

THERMAL DECOMPOSITION PRODUCTS:	CO _x , HC
STABILITY:	Stable product.
HAZARDOUS REACTIONS:	None
MATERIALS TO AVOID:	Strong oxidants

TOXICOLOGICAL INFORMATION:

ORAL TOXICITY:	LD50 greater than 5000 mg/kg
DERMAL TOXICITY:	LD50 greater than 5000 mg/kg
INHALATION TOXICITY:	LC50 greater then 5 mg/l/4h
OTHER INFORMATION:	- Not irritating to eyes and skin
	- Minor irritation may occur after prolonged or repeated contact, especially if normal hygienic rules are not respected.
	- None of the components of this product are listed as carcinogen by NTP, IARC, OSHA, EU or others.

- No components of this product are included in the EU list of dangerous substances (Annex I of Directive 67/548/EEC and its ATP's)

MATERIAL SAFETY DATA SHEET (CONT)

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ECOLOGICAL INFORMATION:

GENERAL INFORMATION:

This product is expected to be resistant to biodegradation and to persist in the environment. No specific environmental data are available for this product. Handle according to general working hygiene practices to avoid pollution and release into the environment.

DISPOSAL CONSIDERATIONS:

DISPOSAL OF PRODUCT:

Do not dispose of the product, either new or used, by discharging into sewers, tunnels, lakes or water courses. Deliver to a qualified official collector.

EUROPEAN WASTE CATALOGUE CODE:

13 02 02

TRANSPORT INFORMATION:

RID/ADR:

Does not belong to any class of danger.

ICAO/IATA:

Does not belong to any class of danger.

IMO-IMDG CODE:

Does not belong to any class of danger.

REGULATORY INFORMATION:

APPLICABLE LAWS AND REGULATIONS:

National laws on classification and labeling of dangerous substances/preparations (Adoption of Directive 67/548/CE and subsequent Adaptations to Technical Progress – ATP). National adoption of Directives 89/391/CEE, 89/654/CEE, 89/655/CEE, 89/656/CEE, 90/269/CEE, 90/270/CEE, 90/394/CEE, 90/679/CEE. National adoption of Directive 75/469/CEE concerning disposal of used oils. Relevant national laws on prevention of water pollution. Relevant national laws on recycling and re-use of waste materials. Relevant national laws on health and safety on the workplace.

OTHER INFORMATION:

None

THIS INFORMATION RELATES ONLY TO THE SPECIFIC PRODUCT AND MAY NOT BE VALID IF THE PRODUCT IS USED IN COMBINATION WITH ANY OTHER MATERIAL OR IN ANY PROCESS. THE INFORMATION IN THIS SHEET ARE ACCORDING TO OUR BEST KNOWLEDGE AT THE DATE OF PRINTING. THIS SAFETY DATA SHEET HAS BEEN CHECKED AND PRINTED ON MARCH 26, 2001.