

RYE - PRODUCT SAFETY DATA SHEET

PRODUCT IDENTIFICATION

PRODUCT NAME: **RYE INDUSTRIAL GEAR OIL 68, 100, 150, 220, 320,460,680**

INFORMATION ON INGREDIENTS

Blends of highly refined mineral oils with a composite extreme pressure anti-wear additive which also has anti-corrosion properties.

Ingredient:	Occupational Exposure Standard	Concentration
Highly refined mineral oil	(OES oil mist, TWA 5mg~m ³)	97-98%

HAZARDS IDENTIFICATION

The following assessments are based on the recommendations of the additive manufacturers and available data on the highly refined mineral oils used in the Rye Oil industrial gear oil range.

INGESTION:	Unlikely to have any effects if small amounts are swallowed; larger amounts may cause nausea and diarrhoea.
SKIN CONTACT:	Unlikely to cause irritation on brief or occasional contact; prolonged, repeated and heavy direct contact with the skin over a long period of time may lead to defatting of the skin, erythema, dermatitis, oil acne.
EYE CONTACT:	May cause minor irritation if splashed into the eye with short-term redness and stinging.
INHALATION:	No hazards associated in normal operations. If vapours are generated from heating, exposure may cause irritation to the breathing passages and lungs.
ENVIRONMENT:	Dangerous to the environment - bioaccumulative and not readily biodegradable.

ADDITIONAL HEALTH INFORMATION

This product contains petroleum base oils which have been refined by severe solvent extraction. The oils are not listed as possible carcinogens in the Health and Safety Executive guidance note EH58 on the carcinogenicity of mineral oils.

FIRST AID PROCEDURES

INGESTION: DO NOT INDUCE VOMITING because of the dangers of aspiration. Wash mouth out with water. Get medical advice if adverse effects follow.

SKIN CONTACT: Wash skin immediately with soap and water. Do not use solvents or thinners. Remove heavily contaminated clothing and laundry before reuse. Seek medical attention if irritation develops.

EYE CONTACT: Flush eyes immediately with water for 5 minutes. Get medical advice if adverse eye effects follow.

INHALATION: If inhalation of fumes irritates the nose, throat or causes coughing remove to fresh air. Get medical advice if irritation continues.

FIRE-FIGHTING MEASURES

Flash Point (PMC): >200⁰C - not classified as flammable.

Extinguishing Media: Use foam, dry powder or water mist. For small fires use Carbon Dioxide.

DO NOT USE DIRECT WATER JET.

Combustion products - with complete combustion oxides of carbon, sulphur, phosphorus, hydrogen chloride and hydrogen sulphide are likely to be formed.

Incomplete combustion - carbon monoxide and soot.

Fires should be tackled only by trained personnel. Breathing apparatus should be worn when tackling fires in confined spaces.

Use water mist to keep fire-exposed container cool.

ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Prevent skin and eye contact. Remove ignition sources and ensure sufficient ventilation. The product may damage tarmacadam and make surfaces slippery.

ENVIRONMENTAL PRECAUTIONS

Do not wash into drainage systems and prevent entry into sewers and waterways. Prevent leakage onto soil.

METHOD FOR CLEANING UP

Use absorbent material e.g. sand, sawdust, active clay.

Dispose of in accordance with current waste disposal regulations.

HANDLING AND STORAGE

HANDLING

Avoid unnecessary contact. Wash hands thoroughly after handling. Avoid inhalation of vapours, mists or fumes by provision of local ventilation systems. Do not wear contaminated clothing. Launder before reuse.

STORAGE

Keep containers tightly closed. Lie on side to minimise ingress of water. Store drums undercover in racking protected from mechanical impact.

CAUTION: Do not use pressure to empty drum or explosion may result.

Undamaged empty 205 litre drums should be sealed and returned for recycling. All other containers should be disposed of in accordance with the Environmental Protection (Duty of Care) Regulations 1991.

EXPOSURE CONTROLS

The Occupational Exposure Standard (OES) for Mineral Oil Mist, listed in Table 2 of the Health and Safety Executive Guidance Note EH 40/94 "Occupational Exposure Limits, 1994", is as follows -

Long-term exposure limit - 5 mg/m³ (8-hour TWA Reference Period)

Short-term exposure limit - 10 mg/m³ (15-minute Reference Period)

PERSONAL PROTECTION

SKIN: If frequent or continuous contact is likely protective clothing such as protective boots or an apron should be worn. Any contaminated clothing should be laundered before reuse.

HAND: If frequent or continuous contact is likely protective gloves (nitrile rubber or neoprene) should be worn.

EYE: If possibility of splashing occurs safety glasses or safety goggles should be worn.

RESPIRATORY: Respiratory protective equipment is not required. Ensure adequate ventilation.

PHYSICAL PROPERTIES

RYE INDUSTRIAL GEAR OIL	46	68	100	150
Appearance	<---- Light amber/amber mineral oils ---->			
Relative Density at 15°C	0.880	0.885	0.890	0.895
Flash Point PMC °C	210	215	220	230
Viscosity at 40°C mm ² /s	46	68	100	150
Viscosity at 100°C mm ² /s	6.6	8.3	11.0	14.0

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RYE INDUSTRIAL GEAR OIL	220	320	460	680
				Dark

Appearance	<--- Amber mineral oils			--->	mineral oil
Relative Density at 15°C	0.900	0.900	0.905	0.925	
Flash Point PMC °C	240	245	250	260	
Viscosity at 40°C mm ² /s	222	320	460	665	
Viscosity at 100°C mm ² /s	19.0	24.0	30.0	39.0	

STABILITY AND REACTIVITY

The range of RYE Industrial gear oils are stable products under normal operating conditions.

MATERIALS TO AVOID

Water, oxidising agents such as chlorates, nitrates, peroxides.

HAZARDOUS DECOMPOSITION PRODUCTS

Decomposition unlikely in normal conditions, but at excessively high temperatures decomposition may occur evolving hydrogen sulphide and hydrogen chloride.

TOXICOLOGICAL INFORMATION

Repeated skin contact can lead to defatting of the skin, erythema, dermatitis or oil acne.

ECOLOGICAL INFORMATION

Biodegradability: Gear oil 46-100: 50% over 21 days (CEC-L-33-T-82 test).
Gear oil 150-680: 36% over 21 days(CEC-L-33-T-82 test).

Oil products may harm aquatic organisms by physical fouling or smothering, or by forming a blanket on water disrupting the oxygen supply on which many organisms depend.

Oil contamination can also foul and smother birds and marine animals.

Oil residues may contaminate soil preventing oxygen and water passing through the soil thus suffocating soil organisms.

Many oil product constituents are capable of dissolving in body fats and may bioaccumulate in the tissues of organisms.

Aquatic toxicity to goldfish: LC₀ = 10g/l *

* testing difficult due to low solubility of the product.

DISPOSAL CONSIDERATIONS

Place used and contaminated materials/packaging in suitable containers. Dispose of the controlled waste in accordance with Duty of Care Regulations (Environmental Protection Act 1 990 - Section 34(7)) using a licensed waste disposal company.

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TRANSPORT INFORMATION

CLASSIFICATION - non-hazardous.

ADR : 3Z, Lubricating oil.
RID : N/A
IMO : N/A
ICAO : N/A
UN : N/A

LABELLING INFORMATION

CLASSIFICATION - non-hazardous.

This product is not classified as hazardous and therefore does not require a label for classification, risk or safety phrases according to the Chemicals (Hazard Information and Packaging) Regulations 1993.

REGULATORY INFORMATION

All information contained in this data sheet is in accordance with the following

Directives/Regulations:

Chemicals (Hazard Information and Packaging) Regulations 1993.

Health and Safety at Work Act (1974).

Control Of Substances Hazardous to Health Regulations (1988).

Waste Disposal - Environmental Protection (Duty of Care) Regulations 1991.

NOTICE TO USERS

For additional information on health and safety aspects related to the use of this product contact RYE OIL LTD.

The data and advice given in this Material Safety Data Sheet apply only when the product is used for the stated application or applications. The product is not sold as suitable for any other application. When used incorrectly, or when used for applications other than as stated in this Data Sheet, risks not mentioned in this Data Sheet may arise.

If you have purchased the product for supply to a third party, it is your duty to pass to that third party the information given in this Data Sheet. If the third party is not an employer it is his duty to pass the information, given in this Data Sheet, to the employer of whoever uses or handles the product.

It is an employer's duty to advise and instruct his employees handling the product (and others who may be affected) of any hazards described in the Data Sheet and of any precautions which should be taken to ensure safe handling of the product.

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