



MATERIAL SAFETY DATA SHEET

FLUIDAIR INTERNATIONAL LTD.

FLUIDAIR ROTALIFE X OIL

Data Sheet No. L64096 Revision : 18 07 01

Replaces L64096 : 02 04 98

This data sheet has been prepared in accordance with the requirements of the Data Sheet Directive 91/155/EEC.

RECOMMENDED USES

Fluidair Rotalife X Oil is recommended for use as:

A lubricant for rotary sliding vane and screw air compressors

If Fluidair Rotalife X Oil is used for a purpose not covered in this section, FLUIDAIR. Would be grateful to receive information on the application.

KNOWN MISUSES / ABUSES

Fluidair Rotalife X Oil is not to be used as :

none known.

The disposal of Fluidair Rotalife X Oil to soil, watercourses and drains is a legal offence.

1: IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

PRODUCT:	FLUIDAIR ROTALIFE X OIL
COMPANY :	FLUIDAIR INTERNATIONAL LTD.
ADDRESS :	SCHOOL HILL WORKS, KENT STREET BOLTON – GTR MANCHESTER BL1 2LN
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2: COMPOSITION / INFORMATION ON INGREDIENTS

Fluidair Rotalife X Oil is a preparation manufactured from highly refined mineral oils derived from crude petroleum, and additives.

The following components, which have health effects, are present at very low concentrations.

CONC.	COMPONENT	CLASS	RISK PHRASES
<0.05%	Alkyl dithiothiadiazole	Xi	R43 May cause sensitization by skin contact
<0.05%	N,N-Bis (2-ethylhexyl)-methyl-1H-benzotriazole-1-methylamine	Xi	R43 May cause sensitization by skin contact

Exposure limit values exist for the following constituents :

Mineral Oil.

3: HAZARD IDENTIFICATION

Fluidair Rotalife X Oil is not classified as dangerous for supply or conveyance. It contains mineral oil, to which an exposure limit applies, and two skin sensitizers at less than 0.05%, which are identified in section 2 above. Prolonged and repeated skin contact may give rise to dermatitis. Mineral base oil will not biodegrade in anaerobic conditions and, hence, can be persistent. It contains components which have a high potential to bioaccumulate.

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4: FIRST AID MEASURES

INHALATION

Remove to fresh air. If rapid recovery does not occur, obtain medical attention.

SKIN

Skin contact does not normally require first aid. Because of the presence of a skin sensitiser, prompt action to minimize skin contact should be taken. Clothing should be removed, and contaminated skin washed with soap and water. If persistent irritation occurs, medical advice should be sought without delay.

Where a high pressure injection injury has occurred, medical attention should be obtained immediately. Show this Data Sheet to the physician drawing attention to "Notes for Doctors" in Section 11 below.

EYES

Flush the eye with copious quantities of water. If irritation persists refer for medical attention.

INGESTION

DO NOT INDUCE VOMITING

If ingestion is suspected, wash out the mouth with water, and send to hospital immediately. Show this Data Sheet to the physician drawing attention to "Notes for Doctor" in Section 11 below.

5: FIRE - FIGHTING MEASURES

Extinguishants	- Large Fire :	Foam/Water Fog – NEVER USE WATER JET
	- Small Fire :	Foam/Dry Powder / AFFF/CO2/Sand/Earth

6: ACCIDENTAL RELEASE MEASURES

The first concern should be to prevent entry to drains or watercourses.

LARGE SPILLS should be banded by a suitable medium such as sand or earth. The liquid should be reclaimed directly or in an adsorbent medium and then transferred to suitable, clearly marked containers and disposed of in accordance with local byelaws and the requirements of the Environmental Protection Act. 1990.

SMALL SPILLS should be soaked up with sand or earth and disposed of as for large spills.

7: HANDLING AND STORAGE

HANDLING

Fluidair Rotalife X Oil does not require any special handling techniques, but it should be handled in suitable containers and spillage avoided.

STORAGE

The storage of Fluidair Rotalife X Oil is not subject to any special controls or restrictions. It should be stored in properly designed, closable, labeled containers, eg mild steel or high density polyethylene (HDPE).

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8: EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMIT VALUES

The following limits are taken from The Health and Safety Executive's Guidance Note EH40 Occupational Exposure Limits 1998.

UK Occupational Exposure Standards :

Oil Mist, Mineral :	5mg/cubic metre 8-hour TWA value
	10 mg/cubic metre 15-min TWA value

RECOMMENDED PROTECTIVE CLOTHING

Impervious gloves and overalls where contact is likely, and goggles if there is a risk of splashing.

9 : PHYSICAL AND CHEMICAL PROPERTIES

Physical State :	Liquid at ambient temperature
Appearance :	Amber
Odour :	Characteristic, mineral oil
Acidity/Alkalinity :	Not applicable
Initial Boiling Point :	> 320 Deg. C.
Pour Point :	-30. Deg. C.
Flashpoint :	>200 Deg. C.
Flammability :	Not applicable
Autoflammability :	Expected to be > 320 Deg. C.
Flammability Limits	-Upper : 10% vol. -Lower : 1 % vol.
Explosive Properties :	Not applicable
Oxidising Properties :	Not applicable
Vapour Pressure @20 Deg. C. :	<0.1 k. Pa
Relative Density @ 15 Deg. C. :	0.877
Solubility :	Water Solubility : Very Low
	Fat solubility/solvent : Data not available
Partition Coefficient, n-octanol water :	Expected to be > 6
Vapour Density (Air = 1) :	> 1
Viscosity @ 40 Deg. C. :	46 Cst.

10: STABILITY AND REACTIVITY

CONDITIONS TO AVOID

Extremes of temperature. Store between 0 and 50 Deg. C.

MATERIALS TO AVOID

Strong oxidising agents, eg. Chlorates which may be used in agriculture.

DECOMPOSITION PRODUCTS

The substances arising from the thermal decomposition of these products will largely depend upon the conditions bringing about decomposition. The following substances may be expected from normal combustion :

Carbon Dioxide	Polycyclic Aromatic Hydrocarbons
Carbon Monoxide	Unburnt Hydrocarbons
Water	Unidentified Organic and Inorganic Compounds
Particulate Matter	Nitrogen Oxides
Sulphur Oxides	Phosphorous Oxides

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11: TOXICOLOGICAL INFORMATION

ACUTE HEALTH HAZARDS AND ADVICE

Toxicity following single exposure to high levels (orally, dermally or by inhalation) is of a low order. The main hazards are : in the unlikely event of ingestion, aspiration into the lungs with possible resultant chemically induced pneumonia ; the possible allergic effect of alkyl dirhiothiadiazole and N,N-bis(2-ethylhexyl)-methyl-1 H-benzotriazole-1-methylamine to those already sensitized ; and, if the products are handled under high pressures, of high pressure injection injuries.

SKIN

Fluidair Rotalife X Oil contains skin sensitizers at very low concentrations. These may present a risk to people already sensitized, but are unlikely to cause sensitization. High pressure injection injuries can lead to the loss of the affected limb if not treated immediately and properly.

PRECAUTIONS :

Avoid contact with the skin by the use of suitable protective clothing. Where skin contact is unavoidable, use of special barrier cream and a high standard of personal hygiene must be practiced. Extreme care must be exercised where the product is likely to be encountered at high pressures, (eg grease guns) when it is recommended that safe systems of work be employed.

FIRST AID :

Skin contact does not normally require first aid. Because of the presence of skin sensitizers, prompt action to minimize skin contact should be taken. Clothing should be removed, and contaminated skin washed with soap and water. If persistent irritation occurs, medical advice should be sought without delay.

Where a high pressure injection injury has occurred, medical attention should be obtained immediately. Show this Data Sheet to the physician drawing attention to "Notes for Doctors" below.

EYES

Eye contact may cause some discomfort.

PRECAUTIONS :

If there is a risk of splashing while handling the liquid, suitable eye protection should be used.

FIRST AID :

Flush the eye with copious of water. If irritation persists refer for medical attention.

INGESTION

The main hazard following ingestion is of aspiration into the lungs during subsequent vomiting.

PRECAUTIONS :

Accidental ingestion is unlikely. Normal handling and hygiene precautions should be taken to avoid ingestions.

FIRST AID :

DO NOT INDUCE VOMITING.

If ingestion is suspected, wash out the mouth with water, and send to hospital immediately. Show this Data Sheet to the physician drawing attention to "Notes for Doctors" below.

CHRONIC HEALTH HAZARD AND ADVICE

Prolonged and repeated contact with oil products can be detrimental to health. The main hazards arise from skin contact and in the inhalation of mists. Skin contact under conditions of poor hygiene and over prolonged periods can lead to defatting of the skin, dermatitis, erythema, or acne and oil folliculitis. Excessive and prolonged inhalation of oil mists may cause a chronic inflammatory reaction of the lungs and a form of pulmonary fibrosis.

Attention is drawn to the presence of a sensitizer, which is identified in the composition section.

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NOTES FOR DOCTORS

HIGH PRESSURE INJECTION INJURIES

High pressure injection injuries require surgical intervention and possibly steroid therapy to minimize tissue damage and loss of function. Because entry wounds are small and do not reflect the seriousness of the underlying damage, surgical exploration to determine the extent of involvement may be necessary. Local anesthetics or hot soaks should be avoided because they can contribute to swelling, vasospasm and ischaemia. PROMPT surgical decompression, debridement and evacuation of foreign material should be performed under general anesthetic, and wide exploration is essential.

INGESTION AND ASPIRATION OF PETROLEUM PRODUCTS

There may be a risk to health where low viscosity products are aspirated into the lungs following vomiting, although this is uncommon in adults. Such aspiration would cause intense local irritation and chemical pneumonitis. Children, and those in whom consciousness is impaired, will be more at risk. Emesis of lubricants is not usually necessary, unless a large amount has been ingested, or some other compound has been dissolved in the product. If this is indicated – for example, when there is rapid onset of CNS depression from a large ingested volume – gastric lavage under controlled hospital conditions, with full protection of the airway is required. Supportive care may include oxygen, arterial blood gas monitoring, respiratory support and, if aspiration has occurred, treatment with corticosteroids and antibiotics. Seizures should be controlled with Diazepam, or appropriate equivalent drug.

12 : ECOLOGICAL INFORMATION

FLUIDAIR ROTALIFE x Oil contains constituents, present at <025% in total, which are classified as dangerous for the environment R50/53 "Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment".

The information given below refers to the mineral base oil component, which accounts for roughly 95%, of Fluidair Rotalife X Oil.

No ecological information is available on the other constituents.

AIR

Fluidair Rotalife X Oil is a mixture of non – volatile components, which are not expected to be released to air in any significant quantities.

WATER

If released to water, Fluidair Rotalife X Oil will form a floating layer on the surface and its components will not evaporate or dissolve to any great extent. Dissolved components will be absorbed in sediments. In aerobic water and sediments they will biodegrade slowly, but in anaerobic conditions they will persist. Fluidair Rotalife X Oil is practically non – toxic to aquatic organisms but contains components which have a high potential to bioaccumulate, and has the potentiality to physically foul aquatic organisms.

SOIL

Small volumes released on land will be absorbed in the upper soil layers and be biodegraded slowly. Larger volumes may penetrate into anaerobic soil layers in which the product will persist and may reach the water table on which it will form a floating layer. The more soluble components may dissolve but their high soil absorption coefficient and the low solubility will prevent significant contamination of ground water.

13: DISPOSAL CONSIDERATIONS

Fluidair Rotalife X Oil should be disposed of to a licensed waste contractor. Any disposal route should comply with local byelaws and the requirements of the Environmental Protection Act, 1990.

14 : TRANSPORT INFORMATION

Not Dangerous for Conveyance

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15: REGULATORY INFORMATION

This material has been classified according to the requirements of the Dangerous Substances Directive 67/548/EEC as last amended by the 8th Amendment 96/56/EC, the 22nd Adaptation to technical Progress 96/54/EC, and the Preparations directive 88/379/EEC

As last amended by the 4th Adaptation to Technical Progress 96/65/EC.

Not Dangerous for conveyance

16: OTHER INFORMATION

The references set out below give further information on specific aspects.

LEGISLATION

Consumer Protection Act 1987
Control of Pollution Act. 1974
Environmental Protection Act. 1990
Factories Act. 1961
Health and safety at Work Act. 1974

Carriage of Dangerous goods by road and Rail (Classification, Packaging and Labeling)
Regulations Chemical (Hazards, Information, and Packaging for supply) Regulations
Control of Substances Hazardous to Health Regulations
Dangerous Substances in Harbor Areas Regulations
Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations
Road Traffic (Carriage of Dangerous Substances in Packages etc.) Regulations
Road Traffic (Carriage of Dangerous Substances in Road Tankers and Tank Containers) Regulations
Road Traffic (Training of Drivers of Vehicles Carrying Dangerous Goods) Regulations
Reporting of Injuries, Diseases and Dangerous Occurrences Regulations
Special Waste Regulations

GUIDANCE NOTES

HS(G) 71	The storage of packaged dangerous substances
EH/40	Occupational Exposure Limits
EH/58	The Carcinogenicity of Mineral Oils
MS24	Health surveillance of occupational skin disease

OTHER LITERATURE

Concawe Report 86/69 Health Aspects Worker Exposure to Oil Mists
Concawe Report 01/97 Petroleum – First Aid emergency and Medical Advice

Department of the Environment – Waste Management – The duty of Care – A Code Of Practice

ADDRESSES

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