# Safety Data Sheet

Issued: January 19, 2004

## FAAC HP OIL

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

FAAC HP OIL
714015
Hydraulic oil
FAAC S.p.A.
FAAC S.p.A., Via Benini 1 Zola Predosa (BO), ITALY
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## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Preparation description:	Blend of highly-refined mineral oils and additives.
Dangerous components/constituents:	On the basis of available information, the components of this preparation are not expected to impart hazardous properties to this product.

#### 3. HAZARDS IDENTIFICATION

**Human health hazards:** Prolonged or repeated exposure may give rise to dermatitis. Contains mineral oil for which an exposure limit for oil mist applies. Used oil may contain harmful impurities.

Safety hazards:	Not classified as flammable, but will burn.
Environmental hazards:	Not readily biodegradable. Has the potential to bioaccumulate.
Other information:	Not classified as dangerous for supply or conveyance.

## 4. FIRST AID MEASURES

Symptoms and effects:	Not expected to give rise to an acute hazard under normal conditions of use. Under high temperature conditions, vapours irritating to the nose, throat and upper respiratory tract may be produced.
First Aid - Inhalation:	Remove to fresh air. If rapid recovery does not occur, obtain medical attention.
First Aid - Skin:	Remove contaminated clothing and wash affected skin with soap and water. If persistent irritation occurs, obtain medical attention. If high pressure injection injuries occur, obtain medical attention immediately.
First Aid - Eye:	Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.
First Aid - Ingestion:	Do not induce vomiting. Wash out mouth with water and obtain medical attention.
Advice to physicians:	Treat symptomatically. Dermatitis may result from prolonged or repeated exposure.

## 5. FIRE FIGHTING MEASURES

Specific hazards:	Combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates and gases, including carbon monoxide, oxides of sulphur, and unidentified organic and inorganic compounds.
Extinguishing media:	Foam and dry chemical powder. Carbon dioxide, sand or earth may be used for small fires only.
Unsuitable extinguishing media:	Water in a jet. Use of Halon extinguishers should be avoided for environmental reasons.
Protective equipment:	Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.
Other information:	Keep adjacent containers cool by spraying with water.

### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Do not breathe:vapour,mists, aerosols.Ventilate contaminated area thoroughly. Avoid contact with:skin,eyes, clothing. Take off immediately all contaminated clothing.
Personal protection:	Wear: PVC or nitrile rubber gloves. Safety boots - rubber, knee length. Jacket and trousers - PVC.If risk of inhalation of aerosols/mists/spray wear: Half mask respirator with organic vapour cartridge and built-in particulate filter NPF (gas only).In a confined space, wear: Self-contained breathing apparatus open circuit type NPF 2000.).
Environmental precautions:	Prevent from entering into drains, ditches or rivers. Use appropriate containment to avoid environmental contamination. Inform local authorities if this cannot be prevented.
Clean-up methods - small spillage:	Absorb or contain liquid with sand, earth or spill control material. Shovel into a suitable, clearly marked container for disposal or reclamation in accordance with local regulations.
Clean-up methods - large spillage:	Prevent from spreading by making a barrier with sand, earth or other containment material. Reclaim liquid directly or in an absorbent. Dispose of as for small spills.
Other information:	Observe all relevant local regulations. See Section 13 for information on disposal.

## 7. HANDLING AND STORAGE

Handling:	When using do not eat, drink or smoke. When handling product in drums, safety footwear should be worn and proper handling equipment should be used. Prevent spillages.
Storage:	Keep only in original container. Keep in a cool, dry, well- ventilated place. Keep away from direct sunlight and other sources of heat or ignition. Keep in a bunded area.
Other information:	Never siphon by mouth.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering control measures:			aust ventilat s or aerosol	ion if there is a risk of inhalation of s.
Occupational exposu standards:			it values are ts may appl	e given below. Lower y locally:
Component name	Limit type	Value	Unit	Other information
Oil mist, mineral	TWA	5	mg/m <sup>3</sup>	ACGIH/2000

Oil mist, mineral	STEL	10	mg/m <sup>3</sup>	ACGIH/2000	
Hygiene measures:		Wash hands toilet.	before eating	g, drinking, smoking and using the	
Respiratory protecti	on:	Not normally required. If risk of inhalation of aerosols/mists/sprays wear:Half mask respirator with organic vapour cartridge and built-in particulate filter NPF20 (gas only).			
Hand protection:		PVC or nitrile	e rubber glove	2S.	
Eye protection:			cal monogogo e applications	les if splashes are likely to occur or in s.	
Body protection:		Launder ove boots - chem	ralls and und	contamination of personal clothing. ergarments regularly. Safety shoes or .If splashes are likely to occur, e all forms of skin contact.	

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid at ambient temperature
Colour:	Red
Odour:	Characteristic mineral oil
Vapour pressure:	Data not available
Density:	850 to 870 kg/m <sup>3</sup> at 15°C
Kinematic viscosity:	13 to 14 mm <sup>2</sup> /s at 40°C
Vapour density (air=1):	Data not available
Pour point:	< -60°C
Flash point:	circa 105°C (PMCC)
Flammability limit - lower:	Data not available
Flammability limit - upper:	Data not available
Auto-ignition temperature:	Data not available
Solubility in water:	Negligible
n-octanol/water partition coefficient:	Data not available

### 10. STABILITY/REACTIVITY

Stability:

Stable.

Conditions to avoid:

Extremes of temperature and direct sunlight.

Materials to avoid:

Strong oxidizing agents.

Hazardous decomposition products:

Hazardous decomposition products are not expected to form during normal storage.

## **11. TOXICOLOGICAL INFORMATION**

Basis for assessment:	Toxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the toxicology of similar products.	
Acute toxicity - oral:	LD <sub>50</sub> expected to be above 2000 mg/kg	
Acute toxicity - dermal:	LD <sub>50</sub> expected to be above 2000 mg/kg	
Acute toxicity - inhalation:	Not considered to be an inhalation hazard under normal conditions of use.	
Eye irritation:	Expected to be slightly irritant.	
Skin irritation:	Expected to be slightly irritant.	
Respiratory irritation:	If mists are inhaled, slight irritation of the respiratory tract may occur.	
Skin sensitization:	Not expected to be a skin sensitizer.	
Carcinogenicity:	Product is based on mineral oils of types shown to be non- carcinogenic in animal skin-painting studies. Other components are not known to be associated with carcinogenic effects.	
Human effects:	Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis.	
Other information:	Used oils may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal. ALL used oil should be handled with caution and skin contact avoided as far as possible.	

## **12. ECOLOGICAL INFORMATION**

Basis for assessment:	Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products.
Mobility:	Liquid under most environmental conditions. Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile.
Persistence/degradability:	Not expected to be readily biodegradable.
Bioaccumulation:	Contains components with the potential to bioaccumulate.

Ecotoxicity:	Poorly soluble mixture. Product is expected to be practically non-toxic to aquatic organisms, $LL/EL_{50} > 100 \text{ mg/l}$ . ( $LL/EL_{50}$ expressed as the nominal amount of product required to prepare aqueous test extract). May cause physical fouling of aquatic organisms.
Sewage treatment:	Data not available.

## **13. DISPOSAL CONSIDERATIONS**

Precautions:	See Section 8.
Waste disposal:	Used or waste oil should be recycled or disposed of in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the contractor to deal satisfactorily with used oil should be established beforehand. Used or waste oil should not be allowed to contaminate soil or water.
Product disposal:	As for waste disposal.
Container disposal:	All containers should be emptied and returned to the supplier or sent to a drum reconditioner or metal recoverer without removing or defacing markings or labels.
Local legislation:	

#### **14. TRANSPORT INFORMATION**

Not dangerous for conveyance under UN, IMO, ADR/RID and IATA/ICAO codes.

## **15. REGULATORY INFORMATION**

EC Classification:	Not classified as dangerous under EC criteria.
EINECS (EC):	All components listed or polymer exempt.
MITI (Japan):	Not established.
TSCA (USA):	All components listed.
AICS (Australia):	All components listed.
DSL (Canada):	All components listed.
National legislation:	
Other information:	

## **16. OTHER INFORMATION**

Uses and restrictions:	Intended for use as a hydraulic fluid in numerous applications requiring a hydraulic fluid based on a mineral oil. Such applications include: aircraft hydraulic systems, undercarriage retraction mechanisms, flap jacks and control mechanisms, brakes, shock absorbers, automatic pilots, oleo legs, tail wheels, servo units, etc. Also suitable for lubricating de-icing pumps and gearboxes. This product must not be used in systems incorporating natural rubber. Not to be used as an engine lubricating oil. This product must be used, handled and applied in accordance with the requirements of the equipment manufacturer's manuals, bulletins and other documentation.
Technical contact point:	FAAC S.p.A.
Technical contact number:	
Telephone: Telex: Fax:	+39 (0)51 61724 - +39 (0)51 758518
SDS history:	Edition number: 1 First issued: 19/01/2004 Revised:
Revisions highlighted:	
SDS distribution:	This document contains important information to ensure the safe storage, handling and use of this product. The information in this document should be brought to the attention of the person in your organisation responsible for advising on safety matters.
Other information:	

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not be construed as guaranteeing any specific property of the product.