



# EC safety data sheet

page 1

Trade name

**F 12**

status

date of printing

31.03.2003

18.08.2006

## 1. Identification of the substance / preparation and company

**Trade name:**

**F 12**

**Use:**

Lubricating oil

**Packing:**

300 ml	Cat. - No. 853 83	300ml oil change kit	Cat. - No. 896101
300 ml	Cat. - No. 870000084	600ml oil change kit	Cat. - No. 896102

## Identification of the manufacturer / supplier

Address supplier

Leybold Vakuum GmbH  
P.O. Box 510760  
D-50943 Köln  
Phone ++49 (0)221-347-0  
Fax ++49 (0)221-347-1250

Emergency telephone number:

++49 (0)221-347-0

## 2. Composition / information on ingredients

### Chemical characterization

Blend of synthetic esters and additives.

### Dangerous Components:

CAS-No. / Name	Content	Label	R-phrases
----- / Barium sulphonate	2 – 5 w-%	Xi	R38 R43

Barium in this preparation less 0.5 %

### Other information:

There is the possibility of explosion if contact with gas mixtures with an oxygen concentration above 21 Vol-% takes place. In this cases you have to use a lubricant, which is valid from the BAM (Bundesanstalt für Materialforschung und -prüfung) for using in facility components for oxygen.

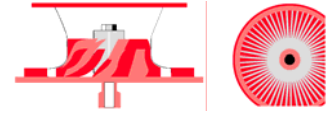
## 3. Hazards identification

### Hazards symbols:

Xi Irritant, contain: Barium sulphonate

### R phrases:

R 43 May cause sensitization by skin contact



## EC safety data sheet

page 2

Trade name

F 12

status

31.03.2003

date of printing

18.08.2006

---

### Human Health Hazards:

May cause sensitisation by skin contact. If swallowed, aspiration into the lungs may cause chemical pneumonitis. Prolonged or repeated exposure may give rise to dermatitis.

### Safety hazards:

Contains mineral oil for which an exposure limit for oil mist applies.

### Environmental hazards:

Avoid spillage. Not readily biodegradable.

---

## 4. First aid measures

### After inhalation:

Remove to fresh air. If breathing but unconscious, place in the recovery position. If breathing has stopped, apply artificial respiration. OBTAIN MEDICAL ATTENTION IMMEDIATELY.

### After skin contact:

Remove contaminated clothing and wash affected skin with soap and water. If high pressure injection injuries occur, obtain medical attention immediately.

### After eye contact:

Rinse immediately with plenty of water for at least 10 minutes and seek medical advice.

### After ingestion:

Do not induce vomiting

Aspiration into the lungs may occur directly or following ingestion. This can cause chemical pneumonitis which may be fatal. If breathing but unconscious, place in the recovery position. If breathing has stopped, apply artificial respiration. OBTAIN MEDICAL ATTENTION IMMEDIATELY.

### Advice to physicians:

Treat symptomatically.

---

## 5. Fire fighting measures

### Suitable extinguishing media:

Foam, Dry chemical powder, carbon dioxide, sand or earth.

### Extinguishing media that must not be used for safety reasons:

Do not use water in a jet.

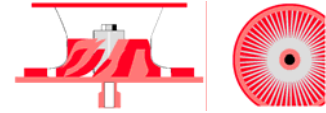
### Special exposure hazards arising from the substance or preparation itself, its combustion products or from resulting gases:

Combustion is likely to give rise to a complex mixture of gases and airborne particulates, including carbon monoxide, oxides of sulphur, and unidentified organic and inorganic compounds.

---

---

---



## EC safety data sheet

page 3

Trade name

F 12

status

31.03.2003

date of printing

18.08.2006

---

### 6. Accidental release measures

#### Personal precautions:

Ventilate contaminated area thoroughly. Minimise contact with skin.

#### Environmental precautions

Prevent further leakage or spillage and prevent from entering drains. Prevent from spreading or entering into drains, ditches or rivers by using sand, earth, or other appropriate barriers.

#### Methods for cleaning up/taking up

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.

---

### 7. Handling and storage

#### Handling

##### Advice on safe handling:

When using do not eat or drink. When handling product in drums, safety footwear should be worn and proper handling equipment should be used. Prevent spillages.

#### Storage

##### Requirements for storage rooms and vessels:

Keep container tightly closed and in a well-ventilated place. Avoid direct sunlight, heat sources, and strong oxidising agents.

##### Further information on storage conditions:

##### Recommended materials:

Mild steel, high density polyethylene for containers or container linings.

---

### 8. Exposure controls / personal protection

#### Occupational exposure standards:

Component name	Limit	type	Value/Unit	Other Information
Oil mist	8-h	TWA	5 mg/m <sup>3</sup>	ACGIH
	15-min	STEL	10 mg/m <sup>3</sup>	ACGIH

#### Engineering control measures:

Use only in well ventilated areas.

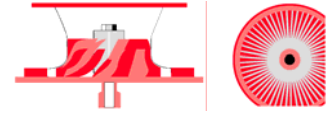
#### Personal protective equipment:

##### Respiratory protection:

Not normally required. If oil mist cannot be controlled, a respirator fitted with an organic vapour cartridge combined with a particulate pre-filter should be used.

---

---



# EC safety data sheet

Trade name

F 12

status

31.03.2003

date of printing

18.08.2006

### Hand protection:

PVC or nitril rubber gloves if splashes are likely to occur and if applicable.

### Eye protection:

Safety spectacles.

### Skin protection:

Minimise all forms of skin contact.

### General protective and hygiene measures:

Don't keep oily rags in your pockets. Wash hands before eating and drinking.

## 9. Physical and chemical properties

### Erscheinungsbild

Form	liquid
Colour	yellow
Odour	typically

### Important health, safety and environmental information

pH-value	not applicable		
Changes in physical state:			
Pour Point	< -60	°C	DIN ISO 3016
Boiling point	no data available		
Flash Point	232	°C	DIN ISO 2592
vapour pressure (20°C)	< 0.01	hPa	
Density (15 °C)	921	kg/m <sup>3</sup>	DIN 51 757 V4
Solubility:			
Solubility in water (20°C)	negligible		
n-octanol/water partition coefficient	not applicable		(log pOW)
kinematic viscosity (40°C)	15	mm <sup>2</sup> /s	DIN 51 562 T1

## 10. Stability and reactivity

### Stability:

Stable under normal use conditions

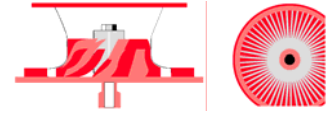
### Materials to avoid:

Strong oxidising agents

There is the possibility of explosion if contact with gas mixtures with an oxygen concentration above 21 Vol-% takes place. In this cases you have to use a lubricant, which is valid from the BAM (Bundesanstalt für Materialforschung und -prüfung) for using in facility components for oxygen.

### Hazardous decomposition products:

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



## EC safety data sheet

page 5

Trade name

F 12

status

31.03.2003

date of printing

18.08.2006

---

### 11. Toxicological information

#### Acute toxicity

#### Acute oral toxicity

LD50	>	2000	mg/kg
Species	rat		

#### Specific symptomatic results:

Not available

#### Skin and Eye irritation:

Expected to be slightly irritant.

#### Skin sensitisation:

May cause sensitization by skin contact.

#### Prolonged and/or repeated contact:

Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis and may make the skin more susceptible to irritation and penetration by other materials.

#### 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:

#### Other information:

Aspiration into the lungs may occur directly or following ingestion. This can cause chemical pneumonitis which may be fatal. Information given is based on a knowledge of the toxicology of similar products.

---

### 12. Ecological information

#### Persistence/degradability:

Information given is based on data on the components and the ecotoxicology of similar products. Not readily biodegradable.

#### Mobility:

Floats on water. Liquid under most environmental conditions. If it enters soil, it will adsorb to soil particles and will not be mobile. Product has the potential to bioaccumulate.

#### Ecotoxicity:

Product is expected to be practically non-toxic to aquatic organisms, LC/EC50 >100mg/L.

---

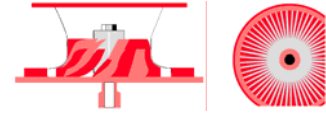
### 13. Disposal considerations

#### Product:

EWC waste code: 130206 (synthetic machine-, gear- and lubricating oils)

---

---



## EC safety data sheet

page 6

Trade name

F 12

status

31.03.2003

date of printing

18.08.2006

---

The listed waste code numbers, according to the European Waste Catalogue (EWC), are to be understood as a recommendation. A final decision must be made in agreement with the regional waste disposal company.

### Uncleaned packaging:

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

Packaging that cannot be cleaned should be disposed of in agreement with the regional waste disposal company.

---

## 14. Transport information

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

---

## 15. Regulatory information

### Labelling in accordance with EC directives:

#### Hazard symbols:

Xi Irritant

contain: Barium sulphonate

#### R-phrases:

R 43 May cause sensitization by skin contact.

#### S-phrases:

S 24 Avoid contact with skin.

S 37 Wear suitable gloves.

#### National Regulations:

---

## 16. Other information

LEYBOLD Vakuum GmbH is not the manufacturer. The above information is based on the information by our suppliers. We ourselves have not checked this information. Any liability which exceeds our existing liabilities is excluded by us.

Please note, that the information provided in the safety data sheets refers only to the product which is indicated. This information may not apply when using the product together with other materials or when processing it.

This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.

Information provided by:

Phone: ++49 (0)221-347-1217

Fax ++49 (0)221-347-31217

---

---