

Safety Data Sheet

Revision date: 2010-05-29

according to regulation 1907/2006/

Print date: 2012-12-14

1 Identification of the substance/preparation and company/undertaking

Product name:	F3
Uses:	Lubricant / Operating fluid for vacuum pumps
Manufacturer/ Supplier:	PFEIFFER VACUUM GmbH Berliner Strasse 43 D-35614 Asslar Telefon ++49 6441/1802-0 Telefax ++49 6441/1802-202 www.pfeiffer-vacuum.com Email: info@pfeiffer-vacuum.de
Emergency tele- phone number:	Tel.: ++49 228/19240

2 Hazards identification

Classification of the substance or mixture

Product definition : Mono-constituent substance

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Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]
Not classified.
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Classification according to Directive 67/548/EEC [DSD]

Not classified.

See Section 16 for the full text of the R phrases or H statements declared above. See Section 11 for more detailed information on health effects and symptoms.

Label elements

Hazard pictograms :	-
Signal word :	No signal word.
Hazard statements :	No known significant effects or critical hazards.
Precautionary statements	
Prevention :	Not applicable.
Response :	Not applicable.
Storage :	Not applicable.
Disposal :	Not applicable.
Supplemental label elements :	Not applicable.

Special packaging requirements	
Containers to be fitted with child-resistant fastenings :	Not applicable.
Tactile warning of danger :	Not applicable.
Other hazards	
Substance meets the criteria for PBT according to Regula- tion (EC) No. 1907/ 2006, Annex XIII :	Not available.
Substance meets the criteria for vPvB according to Regula- tion (EC) No. 1907/ 2006, Annex XIII :	Not available.
Other hazards which do not result in classi- fication :	Not available.

3 Composition/information on ingredients

Substance/mixture :	Mono-constituent substance
Description :	perfluorinated polyether oil Type: [A] Constituent [B] Impurity [C] Stabilising additive

4 First-aid measures

Description of first aid measures

Eye contact :	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact :	Flush contaminated skin with plenty of water. Remove contaminated clo- thing and shoes. Get medical attention if symptoms occur.
Ingestion :	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical person- nel. Get medical attention if symptoms occur.
Protection of first- aiders :	No action shall be taken involving any personal risk or without suitable training.
Moot important	aumentame and offects, both courts and delayed

Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

	Inhalation :	No known significant effects or critical hazards.
	Skin contact :	No known significant effects or critical hazards.
	Eye contact :	No known significant effects or critical hazards.
	Ingestion :	No known significant effects or critical hazards.
	Over-exposure signs/symptoms	
	Eye contact :	No specific data.
	Inhalation :	No specific data.
	Skin contact :	No specific data.
	Ingestion :	No specific data.
	Indication of any immediate medical attention and special treatment needed	
	Notes to physician :	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Specific treatments :	No specific treatment.
5	Fire-fighting m	easures
	Extinguishing med	ia

Suitable extinguishing media :	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguis- hing media :	None known.

Special hazards arising from the substance or mixture

Hazards from the substance or mixture :	In a fire or if heated, a pressure increase will occur and the container may burst.	
Hazardous combus- tion products :	 Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds 	
Advice for firefighters		
Special precautions for	Promptly isolate the scene by removing all persons from the vicinity of the	

firefighters :incident if there is a fire. No action shall be taken involving any personal
risk or without suitable training.Special protective
equipment for fire-figh-
ters :Fire-fighters should wear appropriate protective equipment and self-
contained breathing apparatus (SCBA) with a full face-piece operated in
positive pressure mode. Clothing for fire-fighters (including helmets, pro-
tective boots and gloves) conforming to European standard EN 469 will

provide a basic level of protection for chemical incidents.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel :	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
For emergency res- ponders :	If specialised clothing is required to deal with the spillage, take note of any

information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill :Stop leak if without risk. Move containers from spill area. Dilute with water
and mop up if water-soluble. Alternatively, or if water-insoluble, absorb
with an inert dry material and place in an appropriate waste disposal
container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Reference to other sections :

See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

7 Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Specific end use(s)

Recommendations :

Not available.

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	Industrial sector specific solutions :	Not available.
8	Exposure controls/personal protection	
		ction contains generic advice and guidance. The list of Identified Uses in ulted for any available use-specific information provided in the Exposure
	Control parameters	5
	Occupational exposure limits :	No exposure limit value known.
	Recommended monito- ring procedures :	If this product contains ingredients with exposure limits, personal, work- place atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of ex- posure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.
	Derived effect levels :	No DELs available.
	Predicted effect con- centrations :	No PECs available.
	Exposure controls	
	Appropriate engineering controls :	No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this pro- duct contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker ex- posure below any recommended or statutory limits.
Individual protection measures		easures
	Hygiene measures :	Wash hands, forearms and face thoroughly after handling chemical pro- ducts, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove poten- tially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the worksta- tion location.
	Eye/face protection :	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
	Skin protection	
	Hand protection :	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
	Body protection :	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
	Other skin protection :	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
	Respiratory protection:	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respira-
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tor.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9 Physical and chemical properties

Physical state	Liquid
Colour	Colourless
Odour	Odourless
Odour threshold	Not available
рН	Not available
Melting point/freezing point	Not available
Initial boiling point and boiling range	Not available
Flash point	Not applicable
Evaporation rate	Not available
Flammability (solid, gas) Burning time Burning rate	Not available Not applicable Not applicable
Upper/lower flammability or explosive limits	Not applicable
Vapor density Density Bulk Density	Not available 1.9 g/cm ³ [20°C] Not applicable
Solubility(ies)	Insoluble in the following materials: cold water and hot water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Kinematic (40°C (104°F)): 0.28 cm ² /s (28 cSt)
Explosive properties	Not available
Oxidising properties	Not available

Other information

No additional information.



10 Stability and reactivity

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Reactivity :	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability :	The product is stable.
Possibility of hazardous reactions :	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid :	No specific data.
Incompatible mate- rials :	No specific data.
Hazardous decomposi- tion products:	Under normal conditions of storage and use, hazardous decomposition products should not be produced. > 280°C danger of forming toxic pyrolysis products.

11 Toxicological information

Acute toxicity			
Conclusion/Summary :	Not available.		
Irritation/Corrosion			
Conclusion/Summary :	Not available.		
Sensitiser			
Conclusion/Summary :	Not available.		
Mutagenicity			
Conclusion/Summary :	Not available.		
Carcinogenicity			
Conclusion/Summary :	Not available.		
Reproductive toxicity			
Conclusion/Summary :	Not available.		
Teratogenicity			
Conclusion/Summary :	Not available.		
Specific target organ toxicity (single exposure)			
• • • • • • •	Not available.		
Specific target organ tox	kicity (repeated exposure) Not available.		
Aspiration hazard			
•	Not available.		
Information on the	Not available.		
likely routes of expo- sure :			
Potential acute health effects			
Inhalation :	No specific data.		
Ingestion :	No specific data.		
Skin contact :	No specific data.		
Eye contact :	No specific data.		
Symptoms related to the	physical, chemical and toxicological characteristics		
Inhalation :	No specific data.		

Ingestion :	No specific data.	
Skin contact :	No specific data.	
Eye contact :	No specific data.	
Delayed and imme long term exposur	ediate effects and also chronic effects from short and re	
Short term exposure		
Potential immediate effects :	Not available.	
Potential delayed effects :	Not available.	
Long term exposure		
Potential immediate effects :	Not available.	
Potential delayed effects :	Not available.	
Potential chronic healt	h effects Not available.	
Conclusion/Summary :	Not available.	
General :	No known significant effects or critical hazards.	
Carcinogenicity :	No known significant effects or critical hazards.	
Mutagenicity :	No known significant effects or critical hazards.	
Teratogenicity :	No known significant effects or critical hazards.	
Developmental effects:	No known significant effects or critical hazards.	
Fertility effects :	No known significant effects or critical hazards.	
Other information :	Not available.	

12 Ecological information

Toxicity

Conclusion/Summary :	Not available.		
Persistence and degradability			
Conclusion/Summary :	Not available.		
Bioaccumulative potential			
	Not available.		
Mobility in soil			
Soil/water partition coefficient (K _{OC}) :	Not available.		
Mobility :	Not available.		

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Product	atment m	
		nethods
Methods of		
	disposal :	The generation of waste should be avoided or minimised wherever po- sible. Significant quantities of waste product residues should not be dis sed of via the foul sewer but processed in a suitable effluent treatmen plant. Dispose of surplus and non-recyclable products via a licensed was disposal contractor. Disposal of this product, solutions and any by-pro- ducts should at all times comply with the requirements of environmer protection and waste disposal legislation and any regional local author requirements.
Hazardous v	aste :	Within the present knowledge of the supplier, this product is not regard as hazardous waste, as defined by EU Directive 91/689/EEC.
Packaging		
Methods of	disposal :	The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should be considered when recycling is not feasible.
Special prec	autions :	This material and its container must be disposed of in a safe way. Em containers or liners may retain some product residues. Avoid dispersa spilt material and runoff and contact with soil, waterways, drains and sewers.

14 Transport information

	ADR/RID	IMDG	ΙΑΤΑ
UN number	Not regulated	Not regulated	Not regulated
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No	No	No
Special precautions for user	Not available	Not available	Not available
Additional information	-	-	-

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV - List of substances subject to authorisation

Substances of very high concern

None of the components are listed.

Annex XVII - Restric- tions on the manu- facture, placing on the market and use of certain dangerous substances, mixtures and articles	Not applicable.
Other EU regulations	
Europe inventory :	Not determined.
Black List Chemicals :	Not listed.
Priority List Chemicals:	Not listed.
Integrated pollution prevention and control list (IPPC) - Air :	Not listed.
Integrated pollution prevention and control list (IPPC) - Water :	Not listed.
International regulations	S
Chemical Weapons Convention List Schedule I Chemicals :	Not listed.
Chemical Weapons Convention List Schedule II Chemicals :	Not listed.
Chemical Weapons Convention List Schedule III Chemicals:	Not listed.

Chemical Safety Assessment

This product contains substances for which Chemical Safety Assessments are still required.

16 Other information				
Abbreviations and acronyms :	 ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement PNEC = Predicted No Effect Concentration RRN = REACH Registration Number 			
Procedure used to deri GHS]	ve the classification according to Regulation (EC) No. 1272/2008 [CLP/			
	Einstufung	Justification		
	Not classified			
Full text of abbre- viated H statements :	Not applicable.			
Full text of classifica- tions [CLP/GHS] :	Not applicable.			
Full text of abbre- viated R phrases :	Not applicable.			
Full text of classifica- tions [DSD/DPD] :	Not applicable.			
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