



# SAFETY DATA SHEET

OIL HEATERS

Eni S.p.A  
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**Product:** AGIP FAGUS 20  
**Product code:** 3305  
**Version:** 2  
**Date:** 19/05/2005  
**Supersedes SDS dated:** 18/01/2005

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

**Identification of the substance or Preparation:** AGIP FAGUS 20

**Type of product and use:** Heat transfer fluid

**Company identification:** ENI S.p.A – Refining & Marketing Division

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## 2. COMPOSITION/INFORMATION ON INGREDIENTS

**Components:** Paraffinic base stock, severely solvent refined (99.99 %wt min.) – CAS 64741-89-5

**Hazardous component(s):** None to be reported.

**Other informations:** All the mineral base oils contained in this product have a value < 3 % of DMSO extract, according to IP 346/92 (note L – Dir. 94/69/CE)

## 3. HAZARDS IDENTIFICATION

**Important hazards:** This product is of low oral and dermal toxicity and under normal conditions of use should present no significant health hazards, However, in common with most mineral oils, prolonged and repeated skin contact may cause dermatitis. Handling precautions must be strictly observed. Contact with eyes may cause a light transient irritation. Accidental ingestion of small quantities of the product may cause nausea, discomfort and gastric disturbances. Taking into account the taste and smell of the product however, ingestion of dangerous quantities is very unlikely.

**Environmental hazards:** This product is not classified as dangerous to the environment, according to the criteria set by the EU

**General informations:** Any substance, in case of accidents involving pressurized circuits and the like, may be accidentally injected under the skin, even without external damage. *In such a case, the victim should be brought to an hospital as soon as possible, to get specialised medical treatment.*

## 4. FIRST-AID MEASURES

**Skin contact:** Take off contaminated clothing and shoes. Wash thoroughly with soap and water. If inflammation persists, seek medical advice.

**Eye contact:** Flush with large amounts of water, if irritation persists, seek medical attention.

**Ingestion:** Do not induce vomiting to avoid aspiration into the lungs. If the person is conscious, rinse mouth with water without swallowing. Keep at rest. Call for medical assistance or bring to an hospital. Aspiration of liquid into the lungs: If there is the possibility that the product has been aspirated into the lungs (i.e. in case of spontaneous vomiting), transport the victim to a hospital.

**Inhalation:** In case of disturbances owing to an exposure to a high concentration of vapours or mists, remove the victim from exposure; keep at rest; if necessary, seek medical attention

## 5. FIRE-FIGHTING MEASURES

### EXTINGUISHING MEDIA

**Suitable:** Carbon dioxide, dry chemicals, foam, water spray (fog).

**Not to be used:** Do not use water jets. They could cause splattering, and spread the fire.

**Other information:** Spilled product which is not burning should be covered with sand or foam.

Use water sprays to cool the surfaces exposed to the flames

In case of fire, do not discharge runoff water, collect separately and use a proper treatment.

**Special protective equipment for firefighters:** Personal protection equipment. Wear a suitable breathing apparatus if smoke is present.

**Useful precautions:** Avoid accidental sprays (i.e. from broken couplings) on hot surfaces or electrical contacts (switches, outlets and the like). In case of losses from pressurised circuits, the sprays may form oil mists. Take into account that the lower explosion limits for oil mists is about 45g oil/m<sup>3</sup> air.

## 6. ACCIDENTAL RELEASE MEASURES

**General measures:** Shut off source of spill, if possible. Do not let the product flow into sewers, rivers or water courses. Notify local authorities according to relevant regulations.

### METHODS FOR CLEANING UP:

**Soil:** Contain spilled liquid with sand, earth or other suitable absorbents. Recover free liquid and waste materials in suitable waterproof and oil-resistant containers. Clean contaminated area. Dispose of according to local regulations.

**Water:** Confine the spillage. Remove from surface by skimming or suitable absorbents. Notify local authorities according to regulations. Do not use solvents or dispersants.

## 7. HANDLING AND STORAGE

**Storage:** Storage temperature: ambient to 65°C max

**Handling:** Store the product in cool, well ventilated surroundings. Keep away from sources of ignition. Avoid contact with skin. Do not breathe vapours or mists. Do not smoke.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure limits:** For the control of exposure to the product, the most relevant exposure limits are listed here:

TLV-TWA (A.C.G.I.H. 2004): 5 mg/m<sup>3</sup> (mineral oil mists)

TLV-STEL (A.C.G.I.H. 2004) 10mg/m<sup>3</sup> (mineral oil mists)

If necessary, take into account the other limits listed in the relevant workplace regulations, or in the ACGIH documents.

### PERSONAL PROTECTION:

**Open spaces:** No special measures

**Confined spaces:** Aspirators in case of oil mist; protective shields, in case of oil splashes.

**Handle/eyes/skin protection:** Mineral oil resistant gloves, overalls. Gloves must be felt-lined.

**Hygiene measures:** Do not breathe vapours or mists. Avoid contact with skin and eyes. Do not drink, eat or smoke with dirty hands. Wash hands before going to the toilet. Do not clean hands with dirty or oil-soaked rags. Change clothes if they are dirty or soaked, and in any case at the end of the working shift. Wash hands with water and soap, do not use solvents, or other irritant products which have a defatting effect on the skin.

## 9. PHYSICAL AND CHEMICAL PROPERTIES (TYPICAL VALUES)

**Appearance:** Liquid, bright & clear (ASTM D 4176/1)

**Odour:** Characteristic

**Colour:** Not determined (ASTM D 1500)

**Density at 150C:** 860 kg/m<sup>3</sup> (ASTM D 1298)

**Boiling point/range:** >200 0C (at 10 mmHg) (ASTM D 1160)

**Vapour pressure:** 1.10-3 nPa (200C)

**Viscosity at 400C:** 15.7mm<sup>2</sup>/s (ASTM D 445)

**Solubility in water:** Insoluble in water

**pH:** Not applicable (ASTM D 1287)

**Pour point:** -90C (ASTM D 97)

**Flash point:** 2000C (ASTM D 92)

**Auto-ignition temperature:** >3000C (DIN 51794)

### EXPLOSION LIMITS:

**Lower:** Not determined

**Upper:** Not determined

**Partition coefficient (P o/w):** Not determined

**DMSO extract of base stock:** <3 % wt (IP 346/92)

## 10. STABILITY AND REACTIVITY

**Thermal decomposition products:** CO<sub>x</sub>, HC

**Stability:** Stable product

**Hazardous reactions:** None

**Materials to avoid:** Strong oxidants

## 11. TOXICOLOGICAL INFORMATION

**Oral toxicity (rat):** LD50 greater than 2000 mg/kg (estimated from the composition)

**Dermal toxicity (rabbit):** LD50 greater than 200mg/kg (estimated from the composition)

**Inhalation toxicity (rat):** LCC50 greater than 5 mg/l/4h (estimated from the composition)

**Skin sensitisation:** The product is not classified as a sensitiser according to the criteria set by the EU.

### OTHER INFORMATION:

\* Not irritating to eyes and skin

Minor irritation may occur after prolonged or repeated contact, especially if normal hygienic rules are not respected. None of the components of this product are listed as carcinogen by NTP, IARC, OSHA, EU or others. No components of this product are included in the EU list of dangerous substances (Annex I of Directive 67/548/EEC and its ATP's)

## 13. DISPOSAL CONSIDERATIONS

**Disposal of product:** Do not dispose of the product, either new or used, by discharging into sewers, tunnels, lakes or water courses. Deliver to a qualified official collector.

**European Waste Catalogue Code:** 13 03 07 (Ref: 2001/118/CE)

This code is only a general indication and takes into account the original composition of the product and its intended use. The user has the responsibility of choosing the right code, considering the actual use of the product, alteration and contaminations. The product as it is does not contain halogenated substances.

**Disposal of packaging:** Dispose of in a safe manner, in accordance with local regulations. Do not cut, weld, drill, burn or incinerate empty container or drums, unless they have been cleaned and declared safe.

## 14. TRANSPORT INFORMATION

**RID/ADR:** Does not belong to any class of danger.

**ICAO/IATA:** Does not belong to any class of danger.

**IMO-IMDG code:** Does not belong to any class of danger.

## 15. REGULATORY INFORMATION

**EU labelling information:** Not classified under this legislation.

**Applicable laws and regulations:** National laws on classification and labelling of dangerous substances/preparations. (Adoption of Directive 67/548/CE and subsequent Adaptation to Technical Progress – ATP, and Directive 1999/45/CE). Relevant national laws on health and safety in the work place. National adoption of Directives 89/391/CEE, 89/654/CEE, 89/655/CEE, 89/656/CEE, 90/269/CEE, 90/270/CEE, 90/394/CEE, 90/679/CEE, 93/88/CEE, 95/63/CE, 97/42/CE, 98/24/CE, 99/38/CE. Relevant national laws on recycling and re-use of waste materials. Relevant national laws on prevention of water pollution. National adoption of Directive 75/439/CEE concerning disposal of used oils.

## 16. OTHER INFORMATION

**Nature of revision:** Correction in Section: 2, 3, 4, 5, 6, 8, 11, 12, 13

This Safety Data Sheets conforms to the dispositions of the Directives 88/379/EC and 91/155/EC.

This information relates only to the specific product and may not be valid if the product is used in combination with any other material or in any process. The informations in this sheet are according to our best knowledge at the date of printing. This Safety Data Sheet has been checked and printed on 19/05/2005.