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**Section 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

**Product name:** PAG OIL ISO 100 – HFO 1234yf 250ml  
Cod.11.030YF

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

**Use of substance / mixture:** Compressor lubricant.

**1.3. Details of the supplier of the safety data sheet**

**Company name:** NRF B.V.  
Langenboomseweg 64  
5451 JM Mill  
**Tel:** +31(0)485476476  
**Email:** info@nrf.eu

**Section 2: Hazards identification****2.1. Classification of the substance or mixture**

**Classification under CLP:** This product has no classification under CLP.

**2.2. Label elements**

**Label elements:** This product has no label elements.

**2.3. Other hazards**

**PBT:** This product is not identified as a PBT/vPvB substance.

**Section 3: Composition/information on ingredients****3.2. Mixtures****Section 4: First aid measures****4.1. Description of first aid measures**

**Skin contact:** Wash immediately with plenty of soap and water.

**Eye contact:** Flush the eye immediately with water. If discomfort persists, obtain medical attention.

**Ingestion:** If swallowed, do not induce vomiting. Never administer anything by mouth if a casualty is losing consciousness, is unconscious or is convulsing. Wash out mouth with water. If rapid recovery does not occur, obtain medical attention.

**Inhalation:** \* Remove casualty from exposure ensuring one's own safety whilst doing so.

#### 4.2. Most important symptoms and effects, both acute and delayed

**Skin contact:** \* None known.

**Eye contact:** \* None known.

**Ingestion:** \* None known.

**Inhalation:** \* None known.

**Delayed / immediate effects:** \* None known.

#### 4.3. Indication of any immediate medical attention and special treatment needed

**Immediate / special treatment:** \* None known.

### Section 5: Fire-fighting measures

#### 5.1. Extinguishing media

**Extinguishing media:** Suitable extinguishing media for the surrounding fire should be used. Water spray. Carbon dioxide. Alcohol resistant foam. Dry chemical powder. Use water spray to cool containers.

#### 5.2. Special hazards arising from the substance or mixture

**Exposure hazards:** In combustion emits toxic fumes.

#### 5.3. Advice for fire-fighters

**Advice for fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

### Section 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions:** Refer to section 8 of SDS for personal protection details. Turn leaking containers leak-side up to prevent the escape of liquid.

#### 6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers. Contain the spillage using bunding.

#### 6.3. Methods and material for containment and cleaning up

**Clean-up procedures:** Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

#### 6.4. Reference to other sections

**Reference to other sections:** \* Refer to section 13 of SDS.

### Section 7: Handling and storage

#### 7.1. Precautions for safe handling

**Handling requirements:** Ensure there is sufficient ventilation of the area.



### 7.2. Conditions for safe storage, including any incompatibilities

**Storage conditions:** Store in a cool, well ventilated area. Keep container tightly closed. Avoid incompatible materials and conditions - see section 10 of SDS.

**Suitable packaging:** \* We recommend storing in original packaging. Stainless steel.

### 7.3. Specific end use(s)

**Specific end use(s):** No data available.

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

**Workplace exposure limits:** No data available.

### DNEL/PNEC Values

**DNEL / PNEC** No data available.

### 8.2. Exposure controls

**Engineering measures:** Ensure there is sufficient ventilation of the area.

**Respiratory protection:** Respiratory protection not required.

**Hand protection:** Impermeable gloves.

**Eye protection:** Safety glasses with side-shields. Ensure eye bath is to hand.

**Skin protection:** Impermeable protective clothing.

**Environmental:** \* Refer to specific Member State legislation for requirements under Community environmental legislation.

## Section 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

**State:** Liquid

**Colour:** Colourless/pale yellow.

**Odour:** Characteristic odour

**Evaporation rate:** No data available.

**Oxidising:** No data available.

**Solubility in water:** Insoluble

**Kinematic viscosity:** 100 cSt

**Boiling point/range°C:** No data available.

**Melting point/range°C:** No data available.

**Flammability limits %: lower:** No data available.

**upper:** No data available.

**Flash point°C:** >250

**Part.coeff. n-octanol/water:** No data available.

**Autoflammability°C:** No data available.

**Vapour pressure:** No data available.

**pH:** No data available.

**VOC g/l:** No data available.

### 9.2. Other information

**Other information:** Relative density @ 20°C: 0.985 - 1.010 g/cm<sup>3</sup>. Pour point °C: <-35 (typical).

## Section 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity:** Stable under recommended transport or storage conditions.

### 10.2. Chemical stability

**Chemical stability:** Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

**Hazardous reactions:** Hazardous reactions will not occur under normal transport or storage conditions.

Decomposition may occur on exposure to conditions or materials listed below.

### 10.4. Conditions to avoid

**Conditions to avoid:** Sources of ignition. Flames. Heat.

### 10.5. Incompatible materials

**Materials to avoid:** Strong oxidising agents. Strong acids.

### 10.6. Hazardous decomposition products

**Haz. decomp. products:** In combustion emits toxic fumes.

### 11.1. Information on toxicological effects

**Toxicity values:** No data available.

### Symptoms / routes of exposure

**Skin contact:** \* None known.

**Eye contact:** \* None known.

**Ingestion:** \* None known.

**Inhalation:** \* None known.

**Delayed / immediate effects:** \* None known.

**Other information:** \* None known.

## Section 12: Ecological information

### 12.1. Toxicity

**Ecotoxicity values:** No data available.

### 12.2. Persistence and degradability

**Persistence and degradability:** No data available.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential:** No bioaccumulation potential.

**12.4. Mobility in soil**

**Mobility:** Readily absorbed into soil.

**12.5. Results of PBT and vPvB assessment**

**PBT identification:** This product is not identified as a PBT/vPvB substance.

**12.6. Other adverse effects**

**Other adverse effects:** Not applicable.

**Section 13: Disposal considerations****13.1. Waste treatment methods**

**Disposal operations:** \* Dispose of as normal industrial waste.

**Recovery operations:** Storage of waste pending any of the other recovery operations (excluding temporary storage, pending collection, on the site where the waste is produced).

**Waste code number:** 13 02 06

**Disposal of packaging:** Dispose of as normal industrial waste.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

**Section 14: Transport information**

## 14.1. UN number

Not classified as dangerous in the meaning of transport regulations.

## 14.2. UN proper shipping name

N.A.

## 14.3. Transport hazard class(es) N.A.

## 14.4. Packing group

N.A.

## 14.5. Environmental hazards

Marine pollutant: No

N.A.

## 14.6. Special precautions for user

N.A.

## 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

N.A.

**Section 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**Specific regulations:** Global Chemical Inventories: EC (EINECS) - All components listed or exempt. US (TSCA) - All components listed or exempt. Canada (DSL) - All components listed or exempt. Australia (AICS) - All components listed or exempt. Philippines (PICCS) - All components listed or exempt. South Korea (KECI) - All components listed or exempt. China (IECSC) - All components listed or exempt.

**15.2. Chemical Safety Assessment**

**Chemical safety assessment:** A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

**Section 16: Other information****Other information**

**Other information:** This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.

\* indicates text in the SDS which has changed since the last revision.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.