

# Safety Data Sheet

## Refrigeration Lubricant PAG 46-68-100-125-150- Universal

Safety Data Sheet dated 18/2/2016, version 3

This version cancels and substitutes any previous version

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### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Mixture identification:

Trade name: Refrigeration Lubricant PAG 46-68-100-125-150- Universal

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

Recommended use:

PAG lubricant for A / C systems

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

Company:

ERRECOM SRL

Via Industriale, 14

Corzano (BS) Italy

Tel. +39 030/9719096

Competent person responsible for the safety data sheet:

lab@errecom.it

#### 1.4. Emergency telephone number

+39 02-6610-1029 Poison Control Center Niguarda Ca' Granda - Milano - ITALY

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### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

No other hazards

#### 2.2. Label elements

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Hazard pictograms:

None

Hazard statements:

None

Precautionary statements:

None

Special Provisions:

None

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

#### 2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

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### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

N.A.

#### 3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

None.

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### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

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

Treatment:

None

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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO<sub>2</sub>).

Extinguishing media which must not be used for safety reasons:

None in particular.

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

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

#### 5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

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### SECTION 6: Accidental release measures

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

Wear personal protection equipment.

Remove all sources of ignition.

Remove persons to safety.

See protective measures under point 7 and 8.

#### 6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

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

Wash with plenty of water.

#### 6.4. Reference to other sections

See also section 8 and 13

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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Do not eat or drink while working.

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- See also section 8 for recommended protective equipment.
- 7.2. Conditions for safe storage, including any incompatibilities  
Keep away from food, drink and feed.  
Incompatible materials:  
None in particular.  
Instructions as regards storage premises:  
Adequately ventilated premises.
- 7.3. Specific end use(s)  
None in particular

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### SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters  
No occupational exposure limit available  
DNEL Exposure Limit Values  
N.A.  
PNEC Exposure Limit Values  
N.A.
- 8.2. Exposure controls  
Eye protection:  
Not needed for normal use. Anyway, operate according good working practices.  
Protection for skin:  
No special precaution must be adopted for normal use.  
Protection for hands:  
Not needed for normal use.  
Respiratory protection:  
Not needed for normal use.  
Thermal Hazards:  
None  
Environmental exposure controls:  
None  
Appropriate engineering controls:  
None

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### SECTION 9: Physical and chemical properties

- 9.1. Information on basic physical and chemical properties
- |   |                           |
|---|---------------------------|
| Appearance and colour:                        | liquid colorless          |
| Odour:  | characteristic            |
| Odour threshold:                              | N.A.                      |
| pH:   | N.A.                      |
| Melting point / freezing point:               | N.A.                      |
| Initial boiling point and boiling range:      | >200 °C                   |
| Solid/gas flammability:                       | N.A.                      |
| Upper/lower flammability or explosive limits: | N.A.                      |
| Vapour density:                               | N.A.                      |
| Flash point:                                  | >200 ° C                  |
| Evaporation rate:                             | N.A.                      |
| Vapour pressure:                              | N.A.                      |
| Relative density:                             | 0.985-1.052 (15°C)        |
| Solubility in water:                          | insoluble                 |
| Solubility in oil:                            | N.A.                      |
| Partition coefficient (n-octanol/water):      | N.A.                      |
| Auto-ignition temperature:                    | N.A.                      |
| Decomposition temperature:                    | N.A.                      |
| Viscosity:                                    | 46-150 mm <sup>2</sup> /s |
| Explosive properties:                         | N.A.                      |

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Oxidizing properties:	N.A.
9.2. Other information	
Miscibility:	N.A.
Fat Solubility:	N.A.
Conductivity:	N.A.
Substance Groups relevant properties	N.A.
V.O.C. (w/w):	0 %

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### SECTION 10: Stability and reactivity

- 10.1. Reactivity
  - Stable under normal conditions
- 10.2. Chemical stability
  - Stable under normal conditions
- 10.3. Possibility of hazardous reactions
  - None
- 10.4. Conditions to avoid
  - Stable under normal conditions.
- 10.5. Incompatible materials
  - None in particular.
- 10.6. Hazardous decomposition products
  - None.

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### SECTION 11: Toxicological information

- 11.1. Information on toxicological effects
    - Toxicological information of the mixture:
      - N.A.
    - Toxicological information of the main substances found in the mixture:
      - N.A.
- If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:
- a) acute toxicity;
  - b) skin corrosion/irritation;
  - c) serious eye damage/irritation;
  - d) respiratory or skin sensitisation;
  - e) germ cell mutagenicity;
  - f) carcinogenicity;
  - g) reproductive toxicity;
  - h) STOT-single exposure;
  - i) STOT-repeated exposure;
  - j) aspiration hazard.

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### SECTION 12: Ecological information

- 12.1. Toxicity
  - Adopt good working practices, so that the product is not released into the environment.
  - N.A.
- 12.2. Persistence and degradability
  - N.A.
- 12.3. Bioaccumulative potential
  - N.A.
- 12.4. Mobility in soil
  - N.A.
- 12.5. Results of PBT and vPvB assessment
  - vPvB Substances: None - PBT Substances: None
- 12.6. Other adverse effects
  - None

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### SECTION 13: Disposal considerations

- 13.1. Waste treatment methods  
Recover if possible. In so doing, comply with the local and national regulations currently in force.
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### 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  
IMDG-Marine pollutant: No
- 14.6. Special precautions for user  
N.A.
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code  
N.A.
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### SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture  
Dir. 98/24/EC (Risks related to chemical agents at work)  
Dir. 2000/39/EC (Occupational exposure limit values)  
Regulation (EC) n. 1907/2006 (REACH)  
Regulation (EC) n. 1272/2008 (CLP)  
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013  
Regulation (EU) 2015/830  
Regulation (EU) n. 286/2011 (ATP 2 CLP)  
Regulation (EU) n. 618/2012 (ATP 3 CLP)  
Regulation (EU) n. 487/2013 (ATP 4 CLP)  
Regulation (EU) n. 944/2013 (ATP 5 CLP)  
Regulation (EU) n. 605/2014 (ATP 6 CLP)
- Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:  
Restrictions related to the product:  
No restriction.
- Restrictions related to the substances contained:  
No restriction.
- Where applicable, refer to the following regulatory provisions :  
Directive 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent amendments.  
Regulation (EC) nr 648/2004 (detergents).  
1999/13/EC (VOC directive)
- Provisions related to directive EU 2012/18 (Seveso III):  
N.A.
- 15.2. Chemical safety assessment  
No
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### SECTION 16: Other information

Paragraphs modified from the previous revision:

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SECTION 2: Hazards identification  
SECTION 3: Composition/information on ingredients  
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SECTION 14: Transport information  
SECTION 15: Regulatory information

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,  
Commission of the European Communities  
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van  
Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.  
CAS: Chemical Abstracts Service (division of the American Chemical Society).  
CLP: Classification, Labeling, Packaging.  
DNEL: Derived No Effect Level.  
EINECS: European Inventory of Existing Commercial Chemical Substances.  
GefStoffVO: Ordinance on Hazardous Substances, Germany.  
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.  
IATA: International Air Transport Association.  
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).  
ICAO: International Civil Aviation Organization.  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).  
IMDG: International Maritime Code for Dangerous Goods.  
INCI: International Nomenclature of Cosmetic Ingredients.  
KSt: Explosion coefficient.  
LC50: Lethal concentration, for 50 percent of test population.  
LD50: Lethal dose, for 50 percent of test population.  
LTE: Long-term exposure.  
PNEC: Predicted No Effect Concentration.  
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.  
STE: Short-term exposure.  
STEL: Short Term Exposure limit.  
STOT: Specific Target Organ Toxicity.  
TLV: Threshold Limiting Value.  
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).  
WGK: German Water Hazard Class.