

ORAFON PREMIUM PAG 100 A

MATERIAL SAFETY DATA SHEET (MSDS)

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

- 1.1. Product identifier
Mixture identification :
Trade name : ORAFON PREMIUM PAG 100 A
- 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 :
ORANOSS CO.,LTD.
Via Industriale, 14 Corzano (BS) Italy Tel. +39 030/9719096

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

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.

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

5. FIRE FIGHTING MEASURES

- 5.1. Extinguishing media
Suitable extinguishing media: Water.
Carbon dioxide (CO₂).
Extinguishing media which must not be used for safety reasons: None in particular.

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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.

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

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.

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.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

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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 :	>230 °C
Evaporation rate :	N.A.
Vapour pressure :	N.A.
Relative density :	0.993 (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 :	100 mm ² /s
Explosive properties :	N.A.
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 %

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.

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 sensitization;
 - e) germ cell mutagenicity;
 - f) carcinogenicity;
 - g) reproductive toxicity;
 - h) STOT-single exposure;
 - i) STOT-repeated exposure;
 - j) aspiration hazard.

12. ECOLOGICAL INFORMATION

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- 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. Bio accumulative 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

13. DISPOSABLE CONSIDERATIONS

- 13.1. Waste treatment methods
Recover if possible. In so doing, comply with the local and national regulations currently in force.

14. DISPOSABLE CONSIDERATIONS

- 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
ADR-Environmental Pollutant : No
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.

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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16. OTHER 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.

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