

Safety Data Sheet

PAG PER CO2



Safety Data Sheet dated 3/2/2017, version 3

This version cancels and substitutes any previous version

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

1.1. Product identifier

Mixture identification:

Trade name: PAG PER CO2

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

 Warning, Acute Tox. 4, Harmful if swallowed.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Warning

Hazard statements:

H302 Harmful if swallowed.

Precautionary statements:

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Special Provisions:

None

Contains

tetrahydrofurfuryl alcohol, propoxylated, methyl capped

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

Safety Data Sheet

PAG PER CO2


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:

Qty	Name	Ident. Number	Classification
>= 90%	tetrahydrofurfuryl alcohol, propoxylated, methyl capped	CAS: 353291-27-7	 3.1/4/Oral Acute Tox. 4 H302

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

In case of adverse health effects seek medical advice.

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:

Rinse mouth with water, then drink one or two glasses of water.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

High pressure water jet.

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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

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.

Safety Data Sheet

PAG PER CO2

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

Don't use empty container before they have been cleaned.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container.

Keep away from food, drink and feed.

Incompatible materials:

Keep away from heat.

Protect from direct sunlight.

Do not store together with reductants.

Do not store together with oxidants.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

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:

Tightly fitting safety goggles.

Protection for skin:

Full protection suit.

Protection for hands:

PVC (polyvinyl chloride).

NBR (nitrile rubber).

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance and colour: liquid yellow

Safety Data Sheet

PAG PER CO2

Odour:	characteristic
Odour threshold:	N.A.
pH:	N.A.
Melting point / freezing point:	N.A.
Initial boiling point and boiling range:	N.A.
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:	0.998 - 1.000 g/cm ³
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:	46-68 mm ² /s @ 40°C
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 %

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
 - Strong acids.
 - Strong oxidizing agents.
- 10.6. Hazardous decomposition products
 - None.

SECTION 11: Toxicological information

- 11.1. Information on toxicological effects
- Toxicological information of the product:

PAG PER CO2

a) acute toxicity

Classification:

The product is classified: Acute Tox. 4 H302

Data:

Test: LD50 - Route: Oral > 300 mg/kg

b) skin corrosion/irritation

Classification:

Not classified

Considerations:

Based on available data, the classification criteria are not met

c) serious eye damage/irritation

Classification:

Not classified

Safety Data Sheet

PAG PER CO2

Considerations:	Based on available data, the classification criteria are not met
d) respiratory or skin sensitisation	
Classification:	Not classified
Considerations:	Based on available data, the classification criteria are not met
e) germ cell mutagenicity	
Classification:	Not classified
Considerations:	Based on available data, the classification criteria are not met
f) carcinogenicity	
Classification:	Not classified
Considerations:	Based on available data, the classification criteria are not met
g) reproductive toxicity	
Classification:	Not classified
Considerations:	Based on available data, the classification criteria are not met
h) STOT-single exposure	
Classification:	Not classified
Considerations:	Based on available data, the classification criteria are not met
i) STOT-repeated exposure	
Classification:	Not classified
Considerations:	Based on available data, the classification criteria are not met
j) aspiration hazard	
Classification:	Not classified
Considerations:	Based on available data, the classification criteria are not met

Toxicological information of the main substances found in the product:

N.A.

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

PAG PER CO2

Classification: Not classified for environmental hazards

Considerations: Based on available data, the classification criteria are not met

Data:

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

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.

Safety Data Sheet

PAG PER CO2

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)
Regulation (EU) n. 2015/1221 (ATP 7 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:
Restriction 3
Restrictions related to the substances contained:
No restriction.
- Where applicable, refer to the following regulatory provisions :
Directive 2012/18/EU (Seveso III)
Regulation (EC) nr 648/2004 (detergents).
Dir. 2004/42/EC (VOC directive)
- Provisions related to directive EU 2012/18 (Seveso III):
Seveso III category according to Annex 1, part 1
None
- 15.2. Chemical safety assessment
No Chemical Safety Assessment has been carried out for the mixture.
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SECTION 16: Other information

- Full text of phrases referred to in Section 3:
H302 Harmful if swallowed.

Safety Data Sheet

PAG PER CO2

Hazard class and hazard category	Code	Description
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4

Paragraphs modified from the previous revision:

SECTION 4: First aid measures
 SECTION 5: Firefighting measures
 SECTION 7: Handling and storage
 SECTION 9: Physical and chemical properties
 SECTION 10: Stability and reactivity

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Acute Tox. 4, H302	Calculation method

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.
 PNEC: Predicted No Effect Concentration.
 RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

Safety Data Sheet

PAG PER CO2

STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.