12. ECOLOGICAL INFORMATION

No indication.

13. DISPOSAL CONSIDERATIONS

Before any disposal, gas into the accumulators shall be totally released. Refer to the Instructions brochure or contact PARKER OLAERIndustries for this operation.

14. TRANSPORT INFORMATION

Proper shipping name: Articles, pressurized, pneumatic,containing non-flammable gas.

UN Nr:	3164
Class / Div.	2.2
Subsidiary risk:	None
Hazard label:	2.2 (non-flammable, non-toxic gas)
RID/ADR:	Non subjected (special disposition nb.594)
IATA:	Packing group; -- (Strong outer packaging)
IATA:	Packing instruction: 208
IATA:	Max. quantity per package: No limit
IMDG:	Packing group; IH
IMDG:	Packing instruction Appendix I
IMDG:	Fastening According to Category A

15. REGULATORY INFORMATION

Not included in 67/548/EC (not classified as dangerous substance).

S9	Keep container in well ventilated place.
S23	Do not breath the gas.

16. OTHER INFORMATION

Conformity to PED 97/23/EC
All national/local regulations observed if applicable

Catalogue HY10-4021-M1/EU
GB - Appendix

MATERIAL SAFETY DATA SHEET
according 1907/2006/CE, Article 31
Product: Gas Loaded Accumulator

01.PRODUCT AND COMPANY IDENTIFICATION

1. Product identification
PARKER OLAERgas loaded accumulators are designed in accordance to the European Pressure Directive PED/97/23/EC or national regulations / calculation codes (ASME, DNV, ABS,…). Per definition of EN 14359:2006 standard a gas loaded accumulator is a hydraulic accumulator with separator between liquid and gas. The separator can be a bladder, a diaphragm or a piston.
During transport and storage, PARKER OLAERaccumulators are:
- filled with a gas pre-charge storage (between 2 and 5 bar maximum)
- or filled with a gas pre-charge above gas pre-charge storage

2. Identification of the company

Parker Hannifin Manufacturing France SAS
Etablissement de Colombes
16 rue de Seine
92700 COLOMBES - France
www.parker.com/acde

02. HAZARDS IDENTIFICATION

• Main hazards:

Gas under pressure

• Specific information regarding hazards for human being and environment:
R22:

• There is no fragmentation danger related to the accumulator in transport or storage condition, Nitrogen may cause asphyxiation in high concentration, which could be nevertheless only possible in a non-ventilated space by high accumulation of Nitrogen (it could only be imaginable in case of intentional boring of a high quantity of accumulators).

03. COMPOSITION / INFORMATION ON INGREDIENTS

N° CAS	Substance/ Preparation
07727-37-9	Nitrogen
Other:	
Components/Impurities	Contains no other components or Impurities which will influence the classification of the product

04. FIRST AID MEASURES

4.1. General indication
See. 4.2.

4.2. Inhalation
Nitrogen in high concentration may cause asphyxiation. Symptoms may include loss of mobility/ consciousness.
Victim may not be aware of asphyxiation. Remove victim to uncontaminated area.Keep victim warm and rested. Call a Doctor. Apply artificial respiration if breathing stopped.

4.3 Skin contact
No indication

4.4. Ingestion
No indication

4.5. Indications for the Doctor
No indication

05. FIRE FIGHTING MEASURES

5.1. Suitable extinguishing media

As neither the pressure vessel nor Nitrogen are flammable, all known extinguishing means can be used.

5.2. Specific hazardous due to combustion products

Neither the pressure vessel, nor Nitrogen are flammable and generate combustion products. Because of potential gas formation due to the presence of rubber parts (seals, bladders, etc.) see 5.4.

5.3. Special protective equipment for fire fighters

In confined space, use self-contained breathing apparatus

5.4. Specific indications

Move away from the container and cool with water from a protected position. As the rubber parts are degraded during fire, the gas is released and no burst of the pressure vessel is expected. Because of the possible combustion products generation, arrange a security area protected from wind.

06. ACCIDENTAL RELEASE MEASURES

N.A. because the pressure vessel is tight.

07. HANDLING AND STORAGE

Gas-loaded accumulators shall be stored in a clean and dry area by room temperature in non-corrosive atmosphere. Accumulators shall be kept away from corrosive media or media which degrade painting.

08. EXPOSURE CONTROLS / PERSONNAL PROTECTION

Breathing protection: only in case of fire

09. PHYSICAL AND CHEMICAL PROPERTIES

The following indications are not relative to the pressure vessel but only to Nitrogen

9.1. Appearance

- Physical phase: gas
- Colour; without
- Odour: no odour warning properties

9.2. Physical and chemical properties

- Molecular weight: 28 g
- Melting point: -2l0°C
- Boiling point: -l96°C
- Relative density (gas): 0.97 (air =l)

10. STABILITY AND REACTIVITY

10.1. Conditions to avoid

In general, gas-loaded accumulators shall not be subject to heavy temperature loads.

10.2. Substances to avoid

Avoid accumulator exposure to heavy corrosive media.

10.3. Hazardous decomposition products

Not known (see l1)

10.4. Other indications

No other indications.

11. TOXICOLOGICAL INFORMATION

No indication for normal conditions. In case of fire, combustion products inflame mucosa, more particularly those of respiratory tracts and can conduct, if inhaled in high quantity, to lungs oedema.