



**ARCAD**  
SAFETY FIRST

Reliable purity  
of easy to mix gas sterile dose



[www.arcadophta.com](http://www.arcadophta.com)

# Product specifications

The pure gas Arceole is a sterile kit ready to be mixed for the endotamponade of the retina. Arceole enables a safe mixing for use in the operating room.

## SELECTION OF GAS DEPENDS ON ITS TAMPONADE DURATION

Gas most frequently used \*:

	SF <sub>6</sub>	C <sub>2</sub> F <sub>6</sub>	C <sub>3</sub> F <sub>8</sub>
Retinal detachment without proliferative retinopathy	VERY FREQUENT	DEPENDING ON SITUATION	
Proliferative diabetic retinopathy		DEPENDING ON SITUATION	
Retinal Detachment Macular Hole	VERY FREQUENT	DEPENDING ON SITUATION	DEPENDING ON SITUATION
Giant retinal tears	VERY FREQUENT	DEPENDING ON SITUATION	DEPENDING ON SITUATION
Proliferative retinopathy		DEPENDING ON SITUATION	VERY FREQUENT
Penetrating ocular trauma	VERY FREQUENT	DEPENDING ON SITUATION	DEPENDING ON SITUATION



\* Retinal Diseases – Editor – Ryan S. Chapter: Intraocular gases  
- Stanley Chang – chapter 131 – p2121

VERY FREQUENT

DEPENDING ON SITUATION

## THANKS TO SPECIFIC CHARACTERISTICS

	Tamponade longevity (days)	Presence in the eye (days)	Slightly expansive concentration %	Non expansive concentration %
SF <sub>6</sub>	6	15	20-25	20
C <sub>3</sub> F <sub>8</sub>	30	60	14-17	12
<b>The European touch: C<sub>2</sub>F<sub>6</sub>, the in-between profile*</b>				
C <sub>2</sub> F <sub>6</sub>	12	30	17-20	16

Please read carefully the instruction for use.

\* The C<sub>2</sub>F<sub>6</sub> gas has the same efficiency and safety than C<sub>3</sub>F<sub>8</sub> with a shorter tamponade time. C<sub>2</sub>F<sub>6</sub> in the treatment of retinal detachment associated to PVR therapeutic trial - 1992, 15, 11, p601-604 - O. MOURIES.

- Ellis JD & Al. Surgery for full-thickness macular holes with short-duration prone posturing: results of a pilot study.

Eye (Lond). 2000 Jun;14 ( Pt 3A):307-12 - Bochow TW & Al. Pneumatic retinopexy perfluoroethane (C<sub>2</sub>F<sub>6</sub>) in the treatment of rhegmatogenous retinal detachment. Arch Ophthalmol. 1992 Dec;110(12):1723-4

## SURGICAL TECHNIQUE GUARANTEES THE TIGHTNESS OF THE EYE

Eyes treated with 23-gauge trans-conjunctival sutureless vitrectomy tend to have earlier gas disappearance or incomplete gas fill. Intraoperative suture placement would be a solution.\*

\*Kusuhara S & Al. Intraocular gas dynamics after 20-gauge and 23-gauge vitrectomy with sulphur hexafluoride gas tamponade. Retina. 2011 Feb;31(2):250-6

# Gas safety issues

- The realisation of a perfect non expansive mixing
- **The purity all along the shelf life**
- A total asepsis
- Clear information to the patient

## Arcad safety response

A sterile kit includes all pre-mounted accessories (validated 0.22µm filter, syringe and needle) for a complete safety and comfort of use.

### With Arcad, the guarantee of :

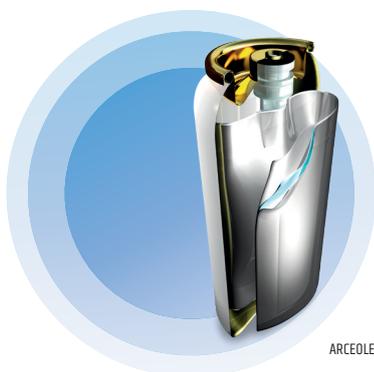
#### PERFECT MIXING :

- Purity guaranteed all along the shelf life
- A minimum of people in the preparation process
- Clear information on the packaging avoid potential mixing mistakes



#### GUARANTEE OF PURITY :

Thanks to canisters technology, the reliability of the gas purity allows a perfect dosage answering the needs of the surgeon throughout the shelf life of the product.



- Two low-pressurized gas chambers around and inside the pouch to avoid permeation.
- A four layer internal pouch to preserve the gas from varnish interactions and impurities.
- Filling technology guarantees pure gas in the canister.

- ARCADOPHTA container prevents gas leakage and air permeation compared to prefilled syringe at atmospheric pressure with polymer plunger.\*
- Avoids vaporization of gas impurities contained in liquified gas tank.
- The soon to be released revision of ISO 16672-2019 standard (endotamponade) refers to the bottle minimum utilization pressure below which the gas shall not be used.

\*Humayun MS, Yeo JH, Koski WS, Michels RG. The rate of sulfur hexafluoride escape from a plastic syringe. Arch Ophthalmol. - 1989 Jun;107(6):853-4



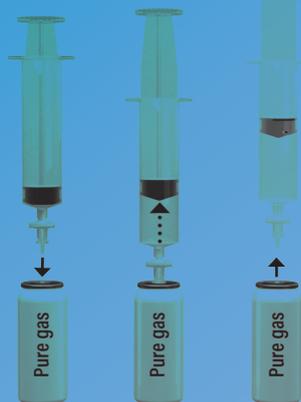
### AVOID LACK OF INFORMATION TO THE PATIENT :

A wrist band and a patient card containing all the precautions the patient must follow during the endotamponade.

Arcadophta provides a multilingual website for patient recommendations : [www.ophgas.com](http://www.ophgas.com)



1 PLUG VERTICALLY



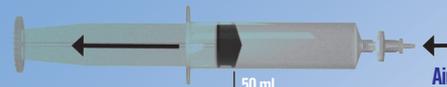
DISCONNECT

# Instructions for use

2 ADJUST PURE GAS VOLUME



3 MAKE YOUR AIR/GAS MIX



## Arcad added value

N°1 OF THE GAS KIT SALES WORLDWIDE

CERTIFIED ISO 13485-2016

MANUFACTURED IN FRANCE



- Save your team time for the preparation.
- Save the purchasing management time.
- No investment needed for regulator-manometer, no maintenance, no added spare part, no over stock.
- Legal status of the product in ophthalmology, reduces the responsibility of the hospital and surgeon.
- ARCEOLE is the N°1 of the gas kit sales worldwide.
- More than 18 years experience in ophthalmology.
- Certified production based on the last ISO 13485-2016.
- Manufactured in France.

## Safety first for our product line



**ARCIOLANE**

Fractionnated and purified silicone oil



**ARCALINE - ARCIOLANE**

Heavy liquids for ophthalmic surgery



**MONOBLUE**

Ultra-purified trypan blue



**OP'COVER**

Corneal protection

**ARCAD**  
SAFETY FIRST

11 Rue Antoine Ricord - 31100 Toulouse - FRANCE  
Tél. + 33 5 61 40 52 35 - Fax + 33 5 61 40 84 66  
info@arcadophta.com

Bibliography on the website : [www.arcadophta.com](http://www.arcadophta.com)