

AURO OCTANE

(Perfluoro-n-octane)

The Liquid Tool for Vitreoretinal Surgery



- *High vapour pressure*
- *Low surface tension and viscosity*
- *High specific gravity*
- *Chemically inert and free of preservative*
- *Very Safe, non-toxic*
- *Well proven*



DESCRIPTION

AURO OCTANE (Perfluoro-n-octane $CF_3-(CF_2)_6-CF_3$) is a hydrocarbon liquid in which all the hydrogen atoms are substituted by fluorine atoms. The chemical inertness and non-toxicity of perfluoro octane is based on the stability of the C-F bonds.

PROPERTIES

Due to special chemical purification procedures, AURO OCTANE, as a 100% fluorinated compound is completely free of hydrogen-containing by-products. Therefore it represents a non-toxic perfluorocarbon liquid. Due to high specific gravity of AURO OCTANE, the retina can easily be flattened, a good precondition for a following steady tamponade with gas or silicone oil.

AURO OCTANE is heavier than water, silicone oils and viscosurgery compounds. This surgery tool provides more effective retina reapplication capabilities than other available compounds. Access to retina tissue and treatment of tractions and membranes is greatly enhanced. Its extremely low viscosity provides for easy, effortless and fully controlled injection. Because its refractive index differs extensively from that of intraocular-irrigation fluids, AURO OCTANE provides an efficient visual interface during operations. Good visualisation allows the surgeon to monitor injected quantity and provides total control over product removal at the end of the operation. The surface tension of AURO OCTANE makes it stay in a single bubble. This property is important for well-controlled removal of the product. The high vapour pressure of AURO OCTANE quickly vapourizes into the intraocular gas, eliminating the need to be rinsed out with BSS.

INDICATIONS

AURO OCTANE is an intra-operative instrument for the treatment of:

- Retinal detachments/ PVR/ PDR
- Giant tears
- Ocular trauma
- Removal of dislocated lenses and foreign bodies from the vitreous

ADVERSE REACTIONS

It cannot be excluded that AURO OCTANE may generate alterations of the retina if present over a long period because of its high gravity. If remnants of AURO OCTANE, in the form of mobile drops stay in front of the retina they may influence the refraction and thus change the visual acuity temporarily.

WARNINGS

AURO OCTANE should not be injected directly into the vitreous, or injected simultaneously with aspiration of the vitreous, as severe intraocular damage may occur. It must always be injected near-side of the retinal tear to prevent any sub-retinal infiltration.

SUPPLY

Sterile 5 ml vial with pouch pack

STORAGE

Store between 2°C and 35°C

COMPARISON OF AURO OCTANE WITH OTHER BRANDS

PROPERTIES	AURO OCTANE (AuroLab)	OCTA LINE (Opsia)	PER FLUORON (Infinitech)	PER OCTA (Optotechnik)
Density (g/cm ³)	1.78	1.79	1.75	1.77
Kinetic viscosity at 25°C	0.80	1.00	0.70	0.80
Vapour pressure (lb/in)	0.81	0.57	0.52	0.57
Surface tension Dyn/cm	15.00	—	16.98	14.98
Refractive index (25°C)	1.28	1.27	1.27	1.27
Boiling point in °C	99.00	—	—	101.00
Average mol. weight	420.00	438.00	438.00	438.00

Note: Lesser mol. wt. has the advantage of minimum dissolved hydrogen which otherwise causes undue toxicity