

Products for rescue, health and beauty

 HaloPolymer



Wide range of application

- **Perfluorinated substitutes of blood**
- **Perfluorinated ingredients for cosmetic**
- **Fluoroorganic medicines for burns treatments**
- **Fluoroorganic liquids for ophthalmological surgery**

Due to unique complex of chemical and physical properties fluoroorganic compounds are found widely used in different spheres of medicine and cosmetology.

Medicines based on fluoroorganic compounds are demonstrate unique effectiveness in comparison with hydrocarbon analogies.



At present time our company produce several types of fluoroorganic substances for medical and cosmetology applications.

We have long time experience in production of fluoroorganic substances and can guarantee high and stable quality of our products.

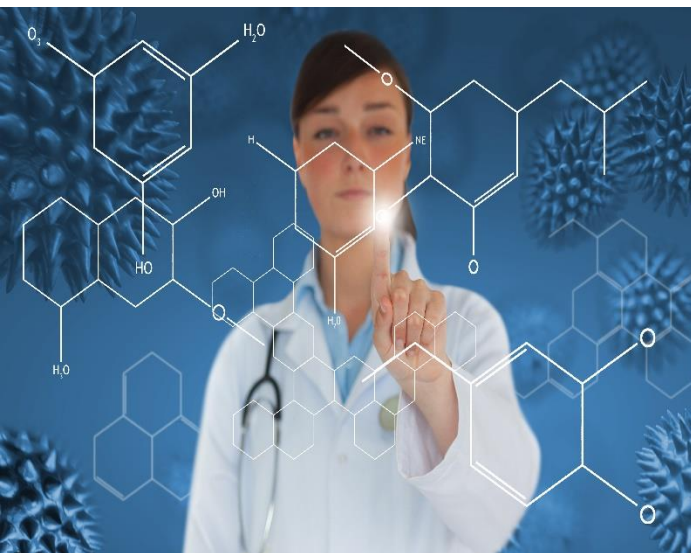
Perfluoro-1,3-dimethylcyclohexane, PFDMCH

CAS 335-27-3

Chemical formula: C₈F₁₆

Description: Colorless transparent liquid without mechanical impurities. Not toxic, biologically and chemically inert substance. Not flammable and not explosive. Is insoluble in most organic solvents.

Application: Base component of medicines for burns treatment. Can be used for treatment of thermal, chemical and solar burns. Efficiency of treatment increasing by 50-60% in comparison to non-fluorinated medicines.



Parameters

Mass content of base material (min)

%

99*

Oxygen solubility

% (Vol.)

54

Boiling point

°C

102

Thermal stability

°C

440

Density

g/cm³

1,85

Dynamic viscosity

mPa*s

1,92

Kinematic viscosity

cSt

1,1

Refractive index

-

1,2895

* By individual order can be provided purity of the product more than 99%.

Perfluorodecaline, Perflunafene**Chemical formula:** C₁₀F₁₈**CAS** 306-94-5

Description: Colorless transparent liquid Not toxic, biologically and chemically inert substance. Not flammable and not explosive. Is insoluble in most organic solvents.

Application: Used as base component of artificial blood, medicines for burns treatment, ingredient of cosmetics and fluids for ophthalmology surgery. It has also used in medicine for partial liquid ventilation.



| Parameters | Units | Value |
|-------------------------------------|-------------------|--------|
| Mass content of base material (min) | % | 93-95* |
| Oxygen solubility | % (Vol.) | 51 |
| Boiling point | °C | 142 |
| Thermal stability | °C | 450 |
| Density | g/cm ³ | 1,94 |
| Dynamic viscosity | mPa*s | 5,1 |
| Kinematic viscosity | cSt | 2,7 |
| Refractive index | - | 1,3130 |

* By individual order can be provided purity of the product more than 95%.

Perfluorohexane, Tetradecafluorohexane**Chemical formula:** C₆F₁₄**CAS** 355-42-0**Description:** Transparent, colorless liquid. Not toxic, biologically and chemically inert substance. Not flammable and not explosive.**Application:** Used in medicine for partial liquid ventilation. liquid breathing could assist in the treatment of patients with severe pulmonary or cardiac trauma, especially in pediatric cases. Liquid breathing has also been proposed for use in deep diving and space travel.

| Parameters | Units | Value |
|-------------------------------------|-------------------|---------|
| Mass content of base material (min) | % | 98,5 |
| Mass content of water (max) | % | 0,01 |
| Boiling point | °C | 57* |
| Melting point | °C | -82* |
| Density | g/cm ³ | 1,67* |
| Surface tension | mN/m | 11,3* |
| Molecular weight | - | 338,04* |
| Refractive index | - | 1,252 |

Perfluorooctane, Octadecafluorooctane**Chemical formula:** C₈F₁₈**CAS** 307-34-6**Description:** Transparent, colorless liquid. Not toxic, biologically and chemically inert substance. Not flammable and not explosive.**Application:** Used as base component of medicines for ophthalmology surgery. The main functions of perfluorocarbon liquids in vitreoretinal surgery include relocating and fixing the detached retina, displacing the subretinal and subchoroidal to fluid anteriorly, revealing proliferative vitreous retinopathy (PVR) for further maneuvers, protecting the macula from exposure to chemicals with potential toxicity, and assisting the removal of foreign body.

| Parameters | Units | Value |
|-------------------------------------|-------------------|--------|
| Mass content of base material (min) | % | 99 |
| Solubility of oxygen (min) | % (Vol.) | 43* |
| Boiling point | °C | 104 |
| Melting point | °C | -25* |
| Density | g/cm ³ | 1,77* |
| Dynamic viscosity | mPa*s | 1,4* |
| Molecular weight | - | 438,06 |
| Refractive index | - | 1,255 |

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