

Octafluoro propane



Perfluoropropane R218

Marking

CAS

Characterization acc. ADR

76-19-7
UN 2424
OCTAFLUOROPROPANE
(REFRIGERANT GAS R 218),
2.2, (C/E)

Cylinder Marking



Shoulder color: bright green

Essential properties

liquified gas, heavier than air, colorless, ethereal smelling

Symbols of risks



Physical Properties

molecular weight	188,020 kg/kmol
gas density at 0°C and 1,013 bar	8,6524 kg/m ³
density ratio to air	6,6921
vapour pressure at 20°C	7,67 bar

For additional safety information see safety data sheet *-C3F8-096

Valves / Manifolds

Valve connection

acc. to national regulations

Recommended Manifolds

Spectrolab
Spectropur



Specification / receptacles		Octafluoro propane e.g.	
Composition			
C ₃ F ₈	≥	99.97	Vol.-%
Impurities			
CO ₂	≤	30	ppmv
CO	≤	10	ppmv
O ₂	≤	90	ppmv
N ₂	≤	240	ppmv
other FHC	≤	400	ppmv
HF	≤	0.5	ppmw
H ₂ O	≤	10	ppmv

Remarks

Octafluoro propane is a greenhouse gas acc. to EU 517/2014, annex 1, group 2.
GWP = 8.830

Octafluoro propane



Perfluoropropane R218

Marking

CAS

Characterization acc. ADR

76-19-7
UN 2424
OCTAFLUOROPROPANE
(REFRIGERANT GAS R 218),
2.2, (C/E)

Cylinder Marking



Shoulder color: bright green

Essential properties

liquified gas, heavier than air, colorless, ethereal smelling

Symbols of risks



For additional safety information see safety data sheet *-C3F8-096

Description

Colourless, liquified gas, heavier than air. Inert with high thermal stability.

Materials

Cylinders and valves: any usual materials
Seals: PTFE, PA, IIR, NBR, CR, EPDM

Physical Properties			
molecular weight	188,020 kg/kmol	vapour pressure at 20 °C	7,67 bar
critical point		gas density at 0 °C and 1,013 bar	8,6524 kg/m ³
temperature	345,0 K	density ratio to air	6,6921
Pressure	26,80 bar	gas density at 15 °C and 1 bar	8,047 kg/m ³
density	0,628 kg/l	conversion factor	
triple point		liquid at Ts to m ³ gas (15 °C, 1 bar)	
temperature	124,85 K	virial coefficient	
Pressure		Bn at 0 °C	-30,1*10 ⁻³ bar ⁻¹
boiling point		B30 at 30 °C	-20,6*10 ⁻³ bar ⁻¹
temperature	236,5 K; -36,7 °C	gaseous state at 25 °C and 1 bar	
liquid density	1,601 kg/l	specific heat capacity cp	
evaporation heat	104 kJ/kg	thermal conductivity	
		dynam. viscosity	