



Westfalen

Product sheet Protadur® E 941 (Nitrogen)

Product name	Protadur® E 941 (Nitrogen)
Physical state	gaseous, compressed
Chemical sign	N ₂
Chemical designation	N2
Purity	99,999 %
Standard	is not subject to any standard
Properties	see safety data sheet
Shoulder color	jet black (RAL 9005)

Minor components	Maximum values
Moisture	4,0 vol. ppm
Hydrocarbons	1,0 vol. ppm
Carbon monoxide	5,0 vol. ppm
Nitrogen monoxide + nitrogen dioxide	5,0 vol. ppm
Oxygen	3,0 vol. ppm

Name	Material number	Bottle type	Bottle container volume	Vapour/filling pressure	Content	Valve	Properties
Protadur E 941 T10 RCyl	B02010110	steel	10,0 l	200,0 bar	2,0 m ³	NBN 226 Forme B	Cage
Protadur E 941 T30 RCyl	B02010130	steel	30,0 l	200,0 bar	5,84 m ³	NBN 226 Forme B	Cage
Protadur E 941 T50 RCyl	B02010150	steel	50,0 l	200,0 bar	10,0 m ³	NBN 226 Forme B	Cage
Protadur E 941 RBundle	B02010312	steel	600,0 l	200,0 bar	120,0 m ³	NBN 226 Forme B	Cage

Unless otherwise stated, these refer to filling pressure at 288,15K (15°C) and to content at 288,15K (15°C) and 0,981 bar.

Manufacture complies with the requirements of EC Regulation 178/2002/EC and corresponds to purity requirements for food additives according to regulation (EU) 231/2012.



Physical data		
operating figures	Wobbe Index Wi	77,35 (-195,8) kWh m ⁻³
Sublimation Point	Heat of sublimation	808,6 kJ kg ⁻¹
	Sublimation temperature	198,7 K (°C)
	Density	1,25 kg m ⁻³
Liquid State	Boiling Point	0,97 K (°C)
	Heat of Evaporation	0,025 kJ kg ⁻¹
	Boiling temperature at the bubble point	1,04 K (°C)
	Liquid Density	126,2 (-147,0) kg m ⁻³
Gas State	Thermal Conductivity (at 288.15 K and 1.013 bar)	0,1253 kg m ⁻³
	Specific heat (at 298.15 K and 1.013 bar)	63,2 (-210,0) kg m ⁻³
	Density (at 273.15 K and 1.013 bar)	34 kg m ⁻³
Critical Point	Temperature	25,8 K (°C)
	Pressure	APLC_28,APLC_29,APLC_34,APLC_31,APLC_36,APLC_37 bar

All mentioned data, values and notes correspond to actual state of knowledge on the date of printing. They make no claim to be correct or complete and therefore do not release the user from his obligation to check them.

Current state 02.09.2020