Propellants

n-pentane

n-pentane: Blowing agent for aerosol gel formulations.

N-Pentane is an extremely flammable liquid hydrocarbon that can be included in personal care gel formulations using the traditional LPG propellant 3.2bar. The n-pentane acts as a blowing agent, generating foam during the handling of the gel by the end user.

N-Pentane can also be used as a solvent for non-polar products.

Chemical Name:	CAS number:
Pentane	N/A

Technical Characteristics:

> Extremely flammable, colorless, deodorized liquid hydrocarbon.
> Good chemical stability.
> Poorly compatible with water and polar solvents.
> It can be mixed with other propellants, in particular with LPG propellant 3.2bar.
> Does not affect the ozone layer and low global warming potential (GWP).

Packaging:

- Cylinder
- Roll drum
- ISOtank

Applications:

Personal care
(hairspray, deodorant, etc.)

Properties:

Chemical Formula	C5H12	
Molecular Weight	72,15	g/mol
Boiling Point	27,8	ºC
Vapor pressure (20ºC)	0,6	bara
Vapor pressure (50ºC)	1,6	bara
Liquid Density (20ºC)	0,63	kg/l
Liquid Density (50ºC)	0,59	kg/l
Kauri - Butanol	< 20	
LEL (Lower Explosive Limit)	1,4	% volume
UEL (Upper Explosive Limit)	7,8	% volume

Table of temperature, pressure and density:

Temperature (ºC)	Pressure (bar)	Liquid density (kg/l)
0	0,2	0,646
5	0,3	0,641
10	0,4	0,636
15	0,5	0,631
20	0,6	0,626
25	0,7	0,621
30	0,8	0,616
35	1,0	0,611
40	1,2	0,606
45	1,4	0,601
50	1,6	0,595
55	1,9	0,590
60	2,1	0,585
65	2,5	0,579

Normative:

GRIT (Gases Research Innovation & Technology) is committed to the continuous improvement of our inbuilt Quality Control, Environment and Major Accident Prevention Systems as well as close collaboration with our product and service providers. The scope of the system includes the packaging, commercialization, storage and innovation of technical gases and the management of residual fluorinated gas and halogenated solvents.

All this work is reflected in our certificates ISO 9001 & ISO 14001.

More information:

If you want more information about our products, contact us.

EUROPE — GRIT, Gases Research Innovation & Technology

BARCELONA

Our plant:
P. I. "El Punsic", parcela 8.3,
08279 Avinyó, Barcelona. Spain.

Our office:
Avda. Diagonal 403, 6º 3ª
08008 Barcelona. Spain.

Phone: (+34) 932 721 400
E-mail: grit@grit.es
Website: www.gasesgrit.com

USA — Summit Refrigerants

HOUSTON

8541 East North Belt
Humble, Texas 77396

Phone: (+1) 281-540-2653
Toll-Free: (+1) 866-971-2653
Fax: (+1) 281-540-0385

DALLAS

2080 McDaniel Drive
Suite 200
Carrollton, Texas 75006

Phone: (+1) 469-458-3195
Fax: (+1) 469-458-3085

BATON ROUGE

10080 Industriplex Avenue
Gonzales, LA 70737

Phone: (+1) 225-744-2653
Fax: (+1) 225-677-6106