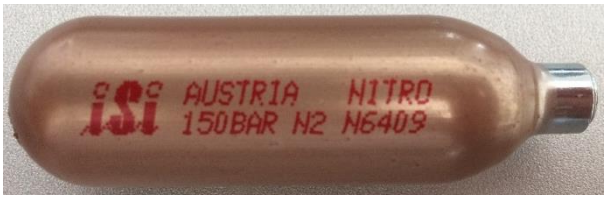
Producer	iSi GmbH
Address	Kürschnergasse 4, A-1210 Vienna

Name of product	**Article-no.:**
Nitrogen chargers N_2	**0705xx**

2,4g (15ml) Nitrogen chargers N_2



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1 Description

Metallic lacquered brown N_2 capsule with 2.4g (15 ml) nitrogen. A disposable steel cylinder containing nitrogen at high pressure. The contents are released by piercing the metal cap.

2 Use

The principal use is in conjunction with iSi Nitro device to create nitrogen infused coffee, tea and other nitrogen infused culinary applications. Max. infused quantity 1 L per charger.

The cylinders comply with the requirements of the regulation (EC) 1935/ 2004 on materials and articles intended to come in contact with food.

N_2 complies with the requirements of regulation (EC) 231/2012 and the requirements of regulation (EC) 1333/2008.

3 Technical data

External surface: lacquered, colour brown

Sealing method: pierceable metal cap
welded closure onto neck-opening of charger

Material of body: special deep drawing steel

Details and tolerances are given in the customer-drawing 60158003

DIMENSION	METRIC UNITS	US / IMPERIAL UNITS
Overall length:	69,0 mm	2,71654 in
Body Diameter:	20,5 mm	0,8070 in
Neck Diameter:	8,7 mm	0,34252 in
Thickness of sealing cap:	0,20 mm	0,0079 in

DIMENSION	METRIC UNITS	US / IMPERIAL UNITS
Internal Volume (approx.)	15,0 ml (equal 0,000015m^3)	0,9154 in^3
Net weight of N_2:	2,4 g	0,0846575 oz
Tare wt. of charger (approx.):	25,4 g	0,90 oz
Gross wt. of charger (approx.):	27,8 g	0,98 oz
Filling pressure:	max. 15 MPa at 15°C	max. 2175 lbf/in^2 at 59°F
Bursting pressure:	> 45 MPa	> 6526 lbf/in^2
Test pressure	22,5 MPa	3 263 lbf/in^2
Pressure/Temperature Characteristics	15,3 MPa at 20°C	2219 lbf/in^2 at 62°F
	17,5 MPa at 50°C	2538 lbf/in^2 at 122°F
	18,9 MPa at 70°C	2741 lbf/in^2 at 158°F
	21,0 MPa at 100°C	3045 lbf/in^2 at 212°F
	21,7 MPa at 110°C	3147 lbf/in^2 at 230°F
	22,5 MPa at 122°C	3263 lbf/in^2 at 252°F

4 Description of gas

Nitrogen, N_2 (other description: Nitro)
Approved food additive: E941 according to EU directive No. 231/2012
Einecs-number 231-783-9
CAS- number: 7727-37-9
ATC- code: V03AN04
PubChem: 947

Gas N_2 99.998% supplied in accordance with iSi Spec. TLV.1012

Gas density at 0.1 MPa	1,1694kg/m^3 at 15°C	0,073 lb/ft^3 at 59°F
Relative density (air=1)	0,9671	0,9671
Critical temperature	-147°C	-232,6°F
Molecular weight	28,013	
Appearance vapour	colourless	
Appearance liquid	colourless	
Appearance solid	transparent white acicular crystals	
Odour	odorless	
Taste	non applicable	
Fire Hazard	non-flammable	
Toxicity	non-toxic	

5 General product information

Customs tariff no.: 2804 3000

Safety data sheet: A separate Safety Data Sheet from the supplier of N_2 is available.

6 Warning notices and application

Use iSi Nitro device and chargers only in strict accordance with safety instructions and operating manuals.

- Only use iSi Nitro chargers in combination with iSi Nitro.
- Do not inhale. Misuse can be physically harmful and dangerous to your health.
- Do not use for any other purpose.
- Keep cool and dry. Do not heat. Keep out of sun and temperatures above 50°C (122°F).
- Chargers are under pressure.
- Never dispose of full chargers. Never use force.
- Keep out of reach of children.
- Keep this packaging until use of last chargers.
- Recycle empty chargers and packaging.
- Non-refillable.

7 Minimum durability

The packaging of iSi Nitro chargers is marked with a ‘best before’ date, according to EU 1169/2011. Although N_2 is unperishable, the ‘best before’ date is defined with 5 years after packing. This will avoid exceeded storage time which could lead to quality and hygiene problems.

8 Storage

N_2 filled chargers are not classified as dangerous goods, therefore it is not necessary to store them as dangerous goods.
Protect from sunlight. Storage temperature limit: -30°C (-22°F) to +50°C (122°F)
Store in a dry place. Do not heat.

9 Traceability

Each iSi Nitro charger is marked with an alphanumeric number in order to ensure the traceability and to increase the product safety (see also directive 2011/91/EU). In addition, each cylinder is printed with the iSi logo, N_2, country of production, nominal filling pressure and NITRO.

10 Transportation

10.1 Air transportation

Air Transport is in accordance with IATA and Special Provision A98 restricted possible.

Special Provision A98 states: "Aerosols, gas cartridges and containers, small, containing gas with a capacity of not more than 50 ml, which do not contain any components subject to these instructions, other than a division 2.2 gas, are not subject to these instructions, unless their release could do so, cause extreme annoyance or discomfort to crew members to prevent proper performance of assigned duties.

The words “NOT RESTRICTED” and “SPECIAL PROVISION A98” must appear on airway bills.

10.2 Road, train and sea transportation

Chargers filled with Nitrogen are for road and train transport according to ADR/RID, for sea transport according to IMDG and internationally according to UN Model Regulation in accordance with UN 2037, Special Provision 191 not subject to the requirements of these regulations.

The special provision 191 stipulates: "Receptacles, small, with a capacity not exceeding 50 ml containing only non-toxic constituents are not subject to these Regulations."

Unlimited transportation is allowed.

11 Reach-Regulation

Nitrogen chargers are classified according to EU 178/2002 as food respectively food additive and fulfil all requirements of this regulation. Products from EU 178/2002 are expressively excluded from the REACH regulation. See regulation EG 1907/2006/REACH, title I/chapter 1/ article 2/ clause 5b and 6d.

12 Manufacturing process