

iSi GmbH Kürschnergasse 4 A-1217 Vienna	Product Information	No.:SMB.I.009.e.03
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Non-refillable 11.4ml (8.4g) Nitrous Oxide (N2O) filled charger, crimped closure		

PRODUCT

11.4ml (8.4g) N2O filled charger - crimped closure.

DESCRIPTION AND USES

A disposable steel cylinder containing nitrous oxide at high pressure. The contents are released by piercing the metal cap. Principal use is in conjunction with appliances designed for producing whipped cream, desserts, foam, sauces and soups.

Max. foamed quantity 0.5L per charger.

TECHNICAL DATA

External surface: lacquered, colour silver-purple
Sealing method: pierceable metal cap with a sealing crimp closed onto neck-opening of charger
Material of body: special deep drawing steel

DIMENSION	METRIC UNITS	US/IMPERIAL UNITS
Overall length:	65.3 (±0.3) mm	2.570 (±0.012) in
Body diameter:	18.3 (+0.1/-0.2) mm	0.720 (+0.004/-0.008) in
Neck diameter:	8.7 (±0.2) mm	0.343 (±0.008) in
Thickness of sealing cap:	0.4 mm	0.016 in
Internal volume (approx.):	11.4 ml	0.70 in ³
Net weight of N2O:	8.4 (±0.2) g	0.296 (±0.007) oz
Tare wt. of charger (approx.):	21.1 g	0.74 oz
Gross wt. of charger (approx.):	29.5 g	1.04 oz
Filling density:	max. 0.75 kg/l	max. 0.434 oz/in ³
Bursting pressure:	> 50 MPa	> 7,250 lbf/in ²
Test pressure:	22.8 MPa at 65°C	3,307 lbf/in ² at 149°F
Pressure/temperature characteristics at a filling density of 0.75 kg/litre:	5.2 MPa at 20°C 16.0 MPa at 50°C 25.1 MPa at 70°C 38.7 MPa at 100°C 43.3 MPa at 110°C	754 lbf/in ² at 68°F 2,321 lbf/in ² at 122°F 3,640 lbf/in ² at 158°F 5,613 lbf/in ² at 212°F 6,280 lbf/in ² at 230°F

DESCRIPTION OF GAS

Nitrous oxide, N2O (other description: laughing gas)

Approved food additive: E942 according to EC directive EC 178/2002 and 96/77/EC

CAS- number: 10024-97-2

ATC- code: N01AX13

PubChem: 948

Gas supplied in accordance to iSi Spec. TLV 0193 / E942 (99% N2O) USP, EU.PH.

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Gas density at 0.1 MPa	1.836 kg/m ³	at 20°C	0.115 lb /ft ³ at 68°F
Relative density (air=1)	1.53	at 20°C	1.53 at 68°F
Critical temperature		36.5°C	98°F
Molecular weight	44.013		
Appearance: vapour	colourless		
liquid	colourless		
solid	transparent white acicular crystals		
Odour	mildly sweet		
Taste	mildly sweet		
Fire Hazard	non-flammable, oxidizing		
Toxicity	non-toxic, in high concentrations may cause asphyxiation, recommended maximum 0.01% v/v for continuous working conditions.		

GENERAL PRODUCT INFORMATION

Customs tariff no.: 2811 29 30

Safety data sheet:

A separate Safety Data Sheet from the supplier of N2O is available.

WARNING NOTICES AND APPLICATION

Use cream whippers and chargers only in strict accordance with safety instructions and operating manuals.

Do not inhale. Misuse can be physically harmful and dangerous to your health. See toxicity note above.
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 packaging until use of last charger.

Recycle empty chargers and packaging.

Not refillable.

MINIMUM DURABILITY

The packaging of iSi cream chargers is marked with a 'best before' date. Although N2O 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 (see also directive 2000/13/EC).

STORAGE

N2O filled chargers are not classified as dangerous goods, therefore it is not necessary to store them as dangerous goods.

Storage temperature limit: maximum 50°C (122°F)

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TRACEABILITY

Each iSi cream charger is marked with an alphanumeric number in order to ensure the traceability and to increase the product safety (see also directive 89/396/EEC).



TRANSPORTATION

Chargers filled with a maximum of 25g of Nitrous Oxide are for road transport according to ADR special provision 584, for sea transport according to IMDG special provision 191 and internationally according to UN Model Regulation special provision 191 not classified as dangerous goods.

REACH-REGULATION

Cream chargers are classified as food or food additive according to EC 178/2002 and fulfil all requirements of this regulation. Products from EC 178/2002 are expressively excluded from the REACH regulation.

See regulation EC 1907/2006/REACH, title I/ chapter 1/ article 2/ clause 5b and 6d.

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