Kürschnergasse 4 A-1217 Vienna / Austria

## **Product Information**

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Non- refillable 10ml (7,5)g Nitrous Oxide N2O filled charger-crimped closure

## **PRODUCT**

10ml (7.5g) N2O filled charger - crimped closure, available in packs of 5, 10, 24 or 50 pieces.

#### **DESCRIPTION AND USES:**

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

#### **TECHNICAL DATA**

External surface:

lacquered, colour- pink

Sealing method: Material of body: Pierceable metal cap, crimp closed on to neck opening of charger

special deep drawing steel

DIMENSION	METRIC UNITS	US/IMPERIAL UNITS
Overall length: Body Diameter: Neck Diameter: Thickness of sealing cap:	65.0 (±0.5) mm 18.0 (±0.2) mm 8.7 (±0.2) mm 0.4 mm	2.58 (±0.02) in 0.709 (±0.008) in 0.343 (±0.008) in 0.016 in
Internal Volume (approx.) Net weight of N2O: Tare wt. of charger (approx.): Gross wt. of charger (approx.): Filling density: Bursting pressure: Test pressure	10.3 ml 7.5 (±0.25) g 20 g 27.5 g max. 0.75 kg/l > 50 MPa 23.5 MPa at 65° C	0.63 in³ 0.265 oz 0.70 oz 0.97 oz max. 0.75 kg/l > 7,250 lbf/in² 3,408 lbf/in² at 149° F
Pressure/Temperature Characteristics at a filling density of 0.75 kg/litre:	5.2 MPa at 20° C 16.5 MPa at 50° C 25.5 MPa at 70° C 38.5 MPa at 100° C 42.5 MPa at 110° C	754 lbf/in² at 68° F 2,392 lbf/in² at 122° F 3,697 lbf/in² at 158° F 5,582 lbf/in² at 212° F 6,162 lbf/in² 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 Relative density (air=1)

1.836 kg/m3 1.53

0.115 lb/cu ft at 68° F

at 20° C 36.5° C

at 20° C

1.53 at 68° F 98° F

Critical temperature Molecular weight

44.013

Appearance: vapour

colourless colourless

liquid solid

transparent white acicular crystals

Odour Taste

mildly sweet 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

#### GS certificate:

iSi Chargers are certified to ON M7388 "Transportable gas cylinders" by TUEV Rheinland Certificate No. S60022701.

#### 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 to 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 ever use force.

Keep out of reach of children.

Keep this packaging until use of last chargers.

Recycle empty chargers and packaging.

#### 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 problems of quality and hygiene (see also directive 2000/13/EC).

#### STORAGE:

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

Storage temperature limit:

maximum

50°C 122° F

iSi GmbH

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BAWAG P.S.K. AG **BIC: OPSKATWW** IBAN: AT83 6000 0000 0751 7709 RLB OÖ AG BIC: RZOOAT2L IBAN: AT34 3400 0000 0265 6486

Rechtsform: Sitz d. Gesellschaft: Handelsgericht Wien: UID-Nr:

Gesellschaft m.b.H. Wien FN 254605 w ATU 61211405

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#### **TRACEABILITY**

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



#### TRANSPORTATION WITHIN EUROPE

Non dangerous goods by road and sea transport. It is therefore not necessary to mark the chargers dangerous goods for transport by road and sea.

The gas N2O (Nitrous Oxide) is classified according to ADR as a Division 2.2 O gas (non-flammable, non-toxic gases, oxidizing).

UN no.:

1070

Title:

nitrous oxide

Special provision:

584

This gas is not subject to the requirements of ADR when:

- It contains not more than 0.5% air in vapour appearance
- It is contained in metal capsules (sodors, sparklets) free from defects which would impair their strength
- The leak tightness of the closure of the capsule is ensured
- · A capsule contains not more than 25 g of this gas
- A capsule contains not more than 0.75g of gas per cm³ of capacity (=0.75 kg/l)

#### **REACH- REGULATION**

Cream chargers are classified according to EC 178/2002 as food respectively food additive 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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# Manufacturing process iSi N2O CHARGER Deep drawing of the charger Necking of the charger Machining of the charger Cleaning of the charger Filling of the cylinder 7.5 ±0,25g Coating of the charger Weighing of the charger (100%) Printing of the charger (iSi and Batch No. for Traceability) Check Logo and Crimping Closure of the charger (100%)Packing of the charger

Vienna, 4.4.2013

Wølfgang Ettenauer Head of Technical Department

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