- **Product's description**

Use

KISAG chargers are disposable steel cylinders which contain pressurized nitrous oxide. These chargers can be used to prepare whipped cream, sauces, soups, desserts and similar preparations and are suitable for domestic or commercial use. KISAG chargers are intended to be used only with the corresponding devices.

Technical data

Refillable	No
Surface colour	silver (painted)
Printing	batch number/year

Material list

Charger	deep drawing steel DC04
Seal and closure	body (High strength plastic), metal stem, rolled closed on to neck opening
Gas filling	N2O (liquid under pressure)

Technical parameters

Total length	74,2 mm (±0,6mm)
Cylinder diameter	18,0 mm (±0,25mm)
Neck diameter	8,7 mm (±0,1mm)
Stem diameter	2,3 mm
Volume	~10,1 ml
Charger weight gross	~28,5g
Charger weight tare	~21,0g
Gas weight	7,25 g (±0,25g)
Bursting pressure cylinder	> 50 MPa
Bursting pressure stem lock	> 40 MPa
Pressure (20° C filling factor 75%) ffadensity0,75Kg/lt)	5,2MPa

Nitrous oxide's description

Chemical formula	N_2O
Other designations	Laughing gas, dinitrogen monoxide
Permitted food additive E number	E942 (EU 231/2012)
JECFA INS code	INS 942
CAS number	10024-97-2
ATC code	N01AX13
PubChem	948

Quality of gas

Technical Delivery Specifications

Purity	> 99 vol% N_2O in the liquid phase
Humidity (H_2O)	≤20 ppm at 20°C and 1,013 bar (v/v)
Smell	Pure, typical and sweetish
Taste	Pure, typical and sweetish
Carbon monoxide (CO)	< 5 ppm (v/v)
Carbon dioxide (CO_2)	< 100 ppm (v/v)
Ammonia (NH_3)	≤ 5 ppm (v/v)
Nitrogen oxides (NO/NO_2)	≤ 1 ppm (v/v)
Halogens (Cl)	≤ 1 ppm (v/v)

Table 1.

The gas specifications described in *Table 1* are regularly monitored and are in accordance with the requirements of JECFA, Codex Alimentarius, EU, EIGA, USP and EPh.

Minimum durability

KISAG cream charger boxes are marked with a minimum durability date. Despite the fact that N_2O is a non-perishable gas, this minimum durability date is limited to 2 years after the packaging date in order to avoid quality- or hygienic problems resulting from excessively long storage times *(see Regulation EU 1169/2011)*.

Traceability

Every KISAG cream charger is printed with a batch number to ensure traceability and to increase the product's safety *(see Regulation EU 1169/2011).*

Warnings

- The gas may only be removed by using the corresponding cream whippers.
- Always follow the instructions for use and safety information of the corresponding cream whippers.
- Pressurized cylinder: do not heat above 50°C.
- Never open by force.
- Misuse may be physically harmful and dangerous for health-high concentrations can cause asphyxiation.
- Liquid gas, oxidizing agent
- Do not inhale.
- Do not use for any other purpose.
- Never dispose of full chargers.

Disposal and recycling

- The chargers are made of recyclable steel and can be disposed of in metal recycling facilities.
- The cardboard packaging can be recycled.

Handling and storage

- Store in a cool and dry place.
- Do not store in direct sunlight or near other heat sources.
- Keep out of reach of children.
- Dispose the charger boxes only when empty.

Transport instructions

Air transportation

According to IATA a transport of oxidizing agent like N_2O is forbidden.

Road, train and sea transportation

Cream chargers are not classified as dangerous goods for road, train and sea transport purposes.

UN number: definitions and provisions

According to the UN Recommendations on the Transport of Dangerous Goods - Model Regulations, cream chargers are classed under the following UN number:

UN number	1070
Classification code	2.2 O
Name and description	Nitrous oxide

ADR Special provision 584:

This gas is not subject to the requirements of ADR as long as:

- it contains not more than 0,5% air in the gaseous state[1]
- it is contained in metal capsules (sodors, sparklets) free from defects which may impair their strength
- the leak-proofness of the closure of the capsule is ensured
- a capsule contains not more than 25 g of this gas and
- a capsule contains not more than 0,75 g of this gas per cm^3 of capacity (= 0,75 kg/l).

1 See: Report of the Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods (spring 2010 session and autumn 2010 session)

UN number: 2037, Classification code: 2.2 O

Receptacles, small containing gas (gas cartridges)

Special provision 191:

Receptacles, small, containing gas are not fitted with a release device. Receptacles with a capacity not exceeding 50 ml containing only non-toxic constituents are not subject to these Regulations.

Other information

REACH Regulation

Cream chargers are classified as food or food additives in accordance with EC 178/2002 and meet all the requirements specified therein. These EC 178/2002 products have been expressly exempted from the REACH Regulation *(See Regulation EC 1907/2006 (REACH): Article 2 "Application", (5)(b) and Article 2 "Application", (6)(d)).*

Safety data sheet

Cream chargers are not a dangerous substance according to the REACH regulation, therefore no safety data sheet should be provided.

Provisions such as R and S phrases

No R and S phrases are required as the chargers are not a dangerous substance.

Regulation EC No 1272/2008 on classification, labeling and packaging of substances and mixtures

Cream chargers are classified as food or food additives in accordance with EC 178/2002 and meet all the requirements specified therein. These EC 178/2002 products have been expressly exempted from the Regulation EC 1272/2008 *(See Regulation EC 1272/2008: Article 1 "Application", (5)(e)(i)).*

Regulation (EC) No 1935/2004 on materials and articles intended to come into contact with food and Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food.

The controllable -*according to EC 1935/2004 and EU 10/2011*- parts of the chargers correspond with the aforementioned regulations and therefore can come into contact with food.