Kartell SpA DIVISIONE LABWARE	TECHNICAL DATA SHEET ITEM 319	Mod. AQ 001 Rev. 0 del 25/09/2003

TECHNICAL SPECIFICATIONS

Trade Name	Graduated narrow neck bottles
Use	Graduated bottle for liquids and powders; Sloping shoulders reduce tendency for residue deposits.
Material	Body in Polyhetylene (PE); cap in Polyprophylene (PP) and undercap in Polyhetylene (LDPE)
Other Features	Shoulder and cap with holes for safety seal or identifiaction labels application. Permanent graduation printed in relief externally.

DIMENSIONAL SPECIFICATIONS

Height with mounted cap	107,00 mm
External base diameter	46,00 mm
Internal mouth diameter	18,50 mm
General dimesional tolerance	+/- 0,50 mm
Bottle wall thickness	1,00 +/- 0,20 mm
Capacity	125 ml
Graduated scale	20 ml each

GENERAL FEATURES

CE Mark	No
Foodstuff suitability	Yes, according to: EC Regulation 1935/2004 EC Regulation 10/2011 The Italian Ministerial Decree 21/03/1973 and subsequent amendments The Italian Presidential Decree 777/82 and subsequent update
Seal granted by	Quality of both cap and mouth thread, presence of the under cap
Translusence	Yes
Temperature range of the bottle	From -50°C to +80°C

STERILIZATION OF THE BOTTLE

Autoclavability + 121°C	No
Gas (Ethylene Oxide)	Yes, without cap and undercap
Dry Heat (+160°C)	No
Chemical (Formalin)	Yes
Irradiation	Yes
Microwave	Yes, without cap and undercap

Quality Assurance
Massimiliano Capitanio

Technical Direction
Guido Borona

CLEANING OPERATIONS

Slight contamination	Wash with neutral detergent (pH 7)
Consistent contamination	Wash with alkalin detergent (pH up to 12)

CHEMICAL RESISTANCES (BOTTLE)

Categories of substances	Reference	Concentrazione %	T. 20° C	T. 40° C	T. 60° C
Inorganic Acid	Sulphuric acid	98	B	B	B
Organic Acid	Benzoic acid	100	A	A	A
Alcohol	Ethanol	100	A	B	B
Aldehydes	Acetaldeyde	100	B	C	-
Inorganic alkali	Isodium hydroxide	50	C	-	-
Organic alkali	Aniline	100	A	B	C
Ketone	Acetone	100	B	C	-
Esther	Ethyl acetate	100	B	C	-
Hydrocarbons, halogenated	Dichloroethylene	100	C	-	-
Hydrocarbons, aromatic	Benzene	100	B	C	-
Hydrocarbons, linear	Hexane	100	C	-	-
Supersolvent	Tetrahydrofuran	100	B	B	C

Legenda (not applicable if neglected):

- A: fair resistence; exposure (30 days) to the chemical does not cause any damage.
- B: sufficient resistence; exposure causes damage of poor importance, which sometimes is only temporary.
- C: poor resistence; exposure to chemical is not allowed, or causes immediate permanent damages.

Results of testing with reference materials are to be considered as indication: in case of specific use it is recommended to carry out preliminary testing.

Information about resistance of plastic materials to temperatures, steriization and washing treatments are based on bulletins issued by the Producers of raw materials , on literature data and on the experience gained in using the products

PACKAGING

Quantity for each bag	100 pcs with mounted cap and undercap
Quantity in each box	4 X 100 = 400 pcs with mounted cap and undercap

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