

Nolato Cerbo AB		Master Product Specification	
Specification number MPS 105	Product <b>Cerbo Standard Laboratory Caps (for test tubes)</b>	Edition 1.0	Valid from 2012-02-01
Prepared by/date Marianne Johansson/ 2012-01-24		Approved by/date Thomas Nilsson/ 2012-01-24	

## 1. General

This specification is valid for:

Article	Article No	Article weight (g)
Cap 15.6 mm Uncoloured	C119650	1.1 ± 0.15
Cap 15.6 mm Yellow	C119651	1.1 ± 0.15
Cap 15.6 mm Red	C119652	1.1 ± 0.15
Cap 15.6 mm Soft, Uncoloured	C119655	1.1 ± 0.15
Cap 13.5 mm Uncoloured	C119660	1.0 ± 0.1
Cap 13.5 mm Red	C119661	1.0 ± 0.1
Cap 13.5 mm Soft, Uncoloured	C119665	1.0 ± 0.1
Cap 11.4 mm Uncoloured	C119670	0.8 ± 0.1
Cap 11.4 mm Red	C119671	0.8 ± 0.1
Cap 11.4 mm Blue	C119672	0.8 ± 0.1
Cap 11.4 mm Soft, Uncoloured	C119675	0.8 ± 0.1
Cap 10.4 mm Uncoloured	C119680	0.7 ± 0.1
Cap 10.4 mm Red	C119681	0.7 ± 0.1
Cap 10.4 mm Blue	C119682	0.7 ± 0.1
Cap 10.4 mm Soft, Uncoloured	C119685	0.7 ± 0.1

## 2. Description

Caps made of Polyethylene.  
 Production method: Injection moulding.  
 Round plastic caps. Provided with Cerbo Standard Laboratory Test Tubes.

### 3. Technical basis

Drawing: Proppar C1 – C4  
(Appendix 1, drawing number P3F-5024-i)

Article number	Article	Material	Masterbatch
C119650	Cap 15.6 mm Uncoloured	Polyethylene CA9150 LDPE, Borealis	-
C119651	Cap 15.6 mm Yellow	Polyethylene CA9150 LDPE, Borealis	Senapsgul PEZ172104X, Clariant
C119652	Cap 15.6 mm Red	Polyethylene CA9150 LDPE, Borealis	Röd PE-14404, Clariant
C119655	Cap 15.6 mm Soft, Uncoloured	Copolymer OE-6417/3717AC Elvaloy	-
C119660	Cap 13.5 mm Uncoloured	Polyethylene CA9150 LDPE, Borealis	-
C119661	Cap 13.5 mm Red	Polyethylene CA9150 LDPE, Borealis	Röd PE-14404, Clariant
C119665	Cap 13.5 mm Soft, Uncoloured	Copolymer OE-6417/3717AC Elvaloy	-
C119670	Cap 11.4 mm Uncoloured	Polyethylene CA9150 LDPE, Borealis	-
C119671	Cap 11.4 mm Red	Polyethylene CA9150 LDPE, Borealis	Röd PE-14404, Clariant
C119672	Cap 11.4 mm Blue	Polyethylene CA9150 LDPE, Borealis	Remafin blå PE19015, Clariant
C119675	Cap 11.4 mm Soft, Uncoloured	Copolymer OE-6417/3717AC Elvaloy	-
C119680	Cap 10.4 mm Uncoloured	Polyethylene CA9150 LDPE, Borealis	-
C119681	Cap 10.4 mm Red	Polyethylene CA9150 LDPE, Borealis	Röd PE-14404, Clariant
C119682	Cap 10.4 mm Blue	Polyethylene CA9150 LDPE, Borealis	Remafin blå PE19015, Clariant
C119685	Cap 10.4 mm Soft, Uncoloured	Copolymer OE-6417/3717AC Elvaloy	-

### 4. Product requirements

Hygiene: Production and packing is made under hygienic conditions.

## 5. Packaging

The caps are packed in LDPE bags which are sealed with clamps.

The LDPE bags are placed in a cardboard outer carton (390X390X360mm) Carton/pallet: 24

Article	Pcs/bag	Pcs/carton	Pcs/pallet
Cap 15.6 mm	1,000 pcs	10,000 pcs	240,000 pcs
Cap 13.5 mm	1,000 pcs	10,000 pcs	240,000 pcs
Cap 11.4 mm	2,000 pcs	16,000 pcs	384,000 pcs
Cap 10.4 mm	2,000 pcs	20,000 pcs	480,000 pcs

Labelling information goods:

Each outer cardboard box/carton is labelled externally with the following

- Article name
- Article No
- Batch No
- Quantity (number of units per carton)
- Manufacturing date
- Supplier information

## 6. Shelf life

The shelf life of plastic products is dependent on the storage conditions such as temperature and light. The products shall be stored dark and in a normal room temperature. Plastic products will under normal ageing conditions become more brittle over time. Information from our raw material suppliers indicates about 5% increased brittleness in 5 years time. The shelf life refers to products not used.

We don't recommend use of products older than six years, as this is the time Nolato Cerbo retains the documentation.

## 6. Acceptance control:

Attribute control ISO 2859  
Variable control ISO 3951

### Classification of defects

<b>Minor defects</b> (The usability of the product is not affected, flaw). AQL = 2.5 (single); 4.0 (group)	Visual marks Colour saturation
<b>Less serious defects</b> (The usability of the product is somewhat reduced). AQL = 1.0 (single); 2.5 (group)	Incompletely filled Damage grooves Dots (burnt material > 1 mm)
<b>Serious defects</b> (The usability of the product is reduced; may affect efficiency in packing lines), AQL = 0.4 (single); 1.0 (group)	Oil, dust etc.
<b>Extremely serious defects</b> (The usability of the product is considerably reduced, possibility of harm to the consumer), AQL = 0.1 (single); 0.4 (group)	Holes

## 7. Revision history

1.0 (2012-01-24) New document

*The information provided in this documentation corresponds to our knowledge on the subject at the date of its publication. This information may be subject to revision as new knowledge and experience become available or any changes in regulations occur. All amendments and modifications will be forwarded automatically to all customers that have purchased any of the products covered in this documentation during the previous twelve (12) months. All Major Changes will be appropriately notified in a timely manner.*

