

Customer Data Sheet

Dosing System

1. General

This Customer Data Sheet consists of the following headings:

- Product performance specification
- Stipulations
- Technical data
- Quality assurance
- Technical drawings
- Material data sheet

2. Product Performance Specification

2.1 Product description

The Dosing System (BDS) is a hand operated dosing system, designed to dispense a certain volume of liquid from a container or bottle.

2.2 Component Materials

The materials used for the BDS are listed in the material data sheet.

This selection of materials will not be changed without informing the customer. The BDS contains no metal parts and is only produced out of polyolefines.

The components are produced from the following materials:

Valve : POM (Acetal Copolymer) Kepital F20-03

Cap : Polypropylene (Homopolymer) Lyondellbasell Moplen HP548R

Tube : Polyethylene (HD) Lyondellbasell Pural GA7760

CR Cap : Polypropylene (Random Copolymer) Lyondellbasell Moplen
RP340N

2.3 General

In case of discrepancies between this document and the “General terms of Sale and Delivery” of Bark Verpakkingen B.V. These general terms of sale and delivery will apply and overrule this document.

3. Stipulations

3.1 Samples

Purpose: to perform tests to determine whether the BDS meets the customer requirements regarding design, size color, chemical resistance, functionality, etc. Samples of the BDS are available at the customer’s request, to a maximum of 50 pieces. There are 4 type of samples:

- *Standard*: not child resistant and no demands on colors. Sent to customer within 48 hours.
- *Child resistant*: no demands on colors. Sent to customer within 48 hours.
- *Custom made*: based on released colors. Sent to customer within 1 month.
- *New configuration samples*: Samples based on SLS models. Sent to customer within 3 months.

The samples provided are representative of standard production lots. For production trials larger volumes can be ordered.

4. Technical data

4.1 General

This section specifies the technical data for the BDS, along with tolerance margins. In addition, this section includes a specification of the conditions under which the data can be obtained. These data apply at the moment of delivery. If the BDS is under deviating conditions, the specified technical data may be affected.

4.2 Test Conditions

Test medium:	Water
	Alcohol
	Olive oil
	Vinegar
	Mineral oil
	Liquid soap
	Aceton

Method of testing:

Container filled with relevant liquid and provided with the BDS in closed position. Stored in a hot cabinet at a temperature of 35°C.

Duration: 2 weeks result: Valve in closed position when cap is opened.
4 weeks result: Valve in closed position when cap is opened.
8 weeks result: Valve in closed position when cap is opened.

4.3 General processing temperatures

The recommended temperature for processing the BDS closure is between minimum 10°C and maximum 40°C

4.4 General Comment

Since we do not have information about the composition of your product to be filled off, the filling off circumstances nor the way of transport regarding the filled off packaging, we can not give you a decisive answer about the compatibility with the used materials.

The responsibility and liability for any possible damage and/or defects will remain in the hands of the customer.

Therefore we do recommend you to execute compatibility and stability tests In order to make sure that the BDS is suitable for your application.

4.5 Technical support

Bark Innovations B.V. offers technical support available for advising on items like:

- Bottle design, if you want to design your own bottle, it is necessary to obtain approval from Bark Innovations B.V. in respect of the design. Without approval, no BDS systems will be supplied.
- Neck finish
- Capping and filling line
- Life time test
- All other occurring items

5. Quality Assurance

5.1 General

Bark Innovations B.V. is dedicated to a system of quality assurance.

The quality assurance system is specified in writing.

Customers can review the quality assurance system if desired.

5.2 Inspection at entry

All purchased goods and services are subjected to a standardized system of inspection by their supplier. If necessary, Bark Innovations B.V. performs additional random checks.

5.3 Process Inspection

BDS component production and assembly are inspected on the basis of Statistic Process Control (SPC); a test procedure is in place to ensure that the quality of processes and products is controlled and maintained on a continuous basis.

5.4 Inspection at exit

Final inspection is reserved for lots that were not manufactured in accordance with the standard production procedure.

If a final inspection is required, it will be based on the basis of the AQL system of its supplier. The quality assurance system of Bark Innovations B.V. or one of her suppliers does not release the recipient from his obligation to carry out his usual incoming goods check or the compatibility and stability tests as mentioned in 4.3.

