### SOL-MILLENNIUM®

### **Technical Data Sheet**





#### Product specification

1. Product name SOL-M™ Hypodermic Needle

2. Description

The SOL-M™ Hypodermic Needle is a sterile, single use, standard hypodermic needle. The device is available in 16 to 31 gauge and in lengths from 3/8" to 2". In addition, the needle tip is available in a regular bevel. The gauge (16-23G & 25G) of thin wall needles is designed to allow the use of a smaller gauge size with increased flow rates over regular walled needles (26-30G & 24G).

3. Characteristics

The SOL-M<sup>™</sup> Hypodermic Needle's device consists of a stainless steel cannula sealed with epoxy glue into a polypropylene hub. The assembly has a protective polypropylene needle cap/shield.

4. Intended use

The SOL-M<sup>™</sup> Hypodermic Needle is sterile hypodermic needle intended to inject fluids into, or withdraw fluids from, parts of the body below the surface of the skin.

5. Instructions for use

N/A

6. Sizes and REF numbers

| REF     | Size       |  |  |  |
|---------|------------|--|--|--|
| 1114318 | 14G*3 1/8" |  |  |  |
| 111615  | 16G*1 1/2" |  |  |  |
| 111810  | 18G*1"     |  |  |  |
| 1118125 | 18G*1 1/4" |  |  |  |
| 111815  | 18G*1 1/2" |  |  |  |
| 111820  | 18G*2"     |  |  |  |
| 111910  | 19G*1"     |  |  |  |
| 111920  | 19G*2"     |  |  |  |
| 111915  | 19G*1 1/2" |  |  |  |
| 112010  | 20G*1"     |  |  |  |
| 112015  | 20G*1 1/2" |  |  |  |
| 112110  | 21G*1"     |  |  |  |
| 112115  | 21G*1 1/2" |  |  |  |
| 112120  | 21G*2"     |  |  |  |
| 1121318 | 21G*3 1/8" |  |  |  |
| 1122125 | 22G*1 1/4" |  |  |  |
| 112210  | 22G*1 ''   |  |  |  |
| 112215  | 22G*1 1/2" |  |  |  |
| 112310  | 23G*1"     |  |  |  |
| 112315  | 23G*1 1/2" |  |  |  |
| 1123125 | 23G*1 1/4" |  |  |  |

| REF    | Size       |
|--------|------------|
| 112334 | 23G*3/4"   |
| 112506 | 25G*5/8"   |
| 112410 | 24G*1"     |
| 112510 | 25G*1"     |
| 112515 | 25G*1 1/2" |
| 112612 | 26G*1/2"   |
| 112638 | 26G*3/8"   |
| 112658 | 26G*5/8"   |
| 112705 | 27G*1/2"   |
| 112734 | 27G*3/4"   |
| 112905 | 29G*1/2"   |
| 113005 | 30G*1/2"   |
| 113010 | 30G*1"     |
| 113112 | 31G*1/2"   |

# SOL-MILLENNIUM®

| Technical information         |                               |                                     |         |                                  |                |  |  |
|-------------------------------|-------------------------------|-------------------------------------|---------|----------------------------------|----------------|--|--|
|                               |                               | Component name                      |         | Material                         |                |  |  |
| List of Materials             |                               | Needle hub                          |         | PP: H1500                        |                |  |  |
|                               |                               | Needle cap                          |         | PP: RP344RK                      |                |  |  |
|                               |                               | Cannula                             |         | Stainless steel: SUS304          |                |  |  |
|                               |                               | Adhesive                            |         | Epoxy: YD-128                    |                |  |  |
|                               |                               | Needle Lubricant                    |         | Silicon oil: Xilikang 201-350cst |                |  |  |
| 2. Latex free                 |                               | YES                                 |         |                                  |                |  |  |
| 3. PHT / DEHP / PVC / BP free | . PHT / DEHP / PVC / BPA free |                                     | YES     |                                  |                |  |  |
| 4. Shelf life                 | . Shelf life                  |                                     | 5 years |                                  |                |  |  |
| 5. Sterilization method       |                               | Sterilized using Ethylene Oxide     |         |                                  |                |  |  |
| 6. Packaging                  | 6 1 Sa                        | 5.1 Sales unit                      |         | 100                              | Units per box  |  |  |
| specification                 | 0.1 Ou                        |                                     |         | 000                              | Units per case |  |  |
| 7. Technical Drawing          | 1                             | 2 3                                 |         |                                  |                |  |  |
|                               | 2.                            | Needle hub<br>Needle cap<br>Cannula |         |                                  |                |  |  |

## SOL-MILLENNIUM®

| Quality and Regulatory information |  |  |   |  |  |  |  |  |
|------------------------------------|--|--|---|--|--|--|--|--|
| 1. Qu                              | ality certificate  | е  | Quality Management System according ISO 13485   |  |  |  |  |  |
| 2. Pro                             | oduct classific  | ation  | Class IIa according to Annex IX of MDD 93/42/EEC  |  |  |  |  |  |
|                                    | The product is compliant with the following standards and regulations: |  |   |  |  |  |  |  |
|                                    |  | Document reference   | Title   |  |  |  |  |  |
|                                    |  |  | ISO 7864:2016   | Sterile hypodermic needles for single use - Requirements and test methods                            |  |  |  |  |
|                                    |  |  | ISO 9626:2016   | Stainless steel needle tubing for the manufacture of medical devices - Requirements and test methods |  |  |  |  |
|                                    |  | ISO 6009:2016  | Hypodermic needles for single use - colour coding for identification  |  |  |  |  |  |
|                                    | ISO 80369-7:2016   | Small-bore connectors for liquids and gases in healthcare applications Part 7: Connectors for intravascular or hypodermic applications |   |  |  |  |  |  |
|                                    | ISO 10993-1:2018   | Biological evaluation of medical devices Part 1:<br>Evaluation and testing within a risk management<br>process                         |   |  |  |  |  |  |
|                                    |  |  | ISO 10993-4:2017  | Biological evaluation of medical devices Part 4: Selection of tests for interactions with blood      |  |  |  |  |
|                                    | 3. List of standards   |  | ISO 10993-5:2009  | Biological evaluation of medical devices Part 5: Tests for in vitro cytotoxicity                     |  |  |  |  |
| 3. Lis                             |  | ISO 10993-7:2008/Cor<br>1:2009   | Biological evaluation of medical devices Part 7: Ethylene oxide sterilization residuals   |  |  |  |  |  |
|                                    | ISO 10993-10:2010  | Biological evaluation of medical devices Part 10: Tests for irritation and skin sensitization  |   |  |  |  |  |  |
|                                    | ISO 10993-11:2017  | Biological evaluation of medical devices Part 11: Tests for systemic toxicity  |   |  |  |  |  |  |
|                                    |  | ISO 15223-1:2016   | Medical devices Symbols to be used with medical device labels, labelling and information to be supplied Part 1: General requirements                                |  |  |  |  |  |
|                                    |  | ISO 11607-1:2019   | Packaging for terminally sterilized medical devices<br>Part 1: Requirements for materials, sterile barri<br>systems and packaging systems                           |  |  |  |  |  |
|                                    | ISO 11607-2:2019   | Packaging for terminally sterilized medical devices<br>Part 2: Validation requirements for forming, sealing and<br>assembly processes  |   |  |  |  |  |  |
|                                    |  | ISO 11737-2:2009   | Sterilization of medical devices Microbiologica methods Part 2: Tests of sterility performed in th definition, validation and maintenance of a sterilizatio process |  |  |  |  |  |
|                                    |  |  | EN 1041:2008+A1:2013  | Information supplied by the manufacturer with medical devices  |  |  |  |  |
|                                    |  |  |   |  |  |  |  |  |
| REV                                | 05   | Date   | 15.03.2019  |  |  |  |  |  |