

: Packaging material specification:

|                          |                        |                       |                            |                              |             |
|--------------------------|------------------------|-----------------------|----------------------------|------------------------------|-------------|
| <b>Item: lotion pump</b> |                        | <b>28/410</b>         |                            |                              |             |
| <b>Specification no.</b> | <b>Revision number</b> | <b>Effective date</b> | <b>Reason for revision</b> | <b>Change request number</b> | <b>Page</b> |
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**General Data-Pump**

| Component   | Material            | Color/Type | Grade |
|-------------|---------------------|------------|-------|
| Dip Tube    | Polyethylene (LDPE) | Natural    | Q281  |
| Housing     | Polypropylene (PP)  | Natural    | K4912 |
| Ball        | Glass               | Natural    | -     |
| Spring      | Stainless Steel     | -          | 304   |
| Stem        | Polypropylene (PP)  | Natural    | K4912 |
| Piston Pole | Polyethylene (HDPE) | Natural    | 5070  |
| Piston      | Polyethylene (LDPE) | White      | Q281  |
| Collar      | Polypropylene       | white      | K4912 |
| Gasket      | Polyethylene (LDPE) |            | Q281  |
| Actuator    | Polypropylene(PP)   | White      | K4912 |

**Detailed parameters & Tests**

| PARAMETER  | Value                      | Tolerance | Test Method No.   |
|--|----------------------------|-----------|---|
| Visual & General Observation                                 | Acceptable                 | -         | PMT 0001  |
| Presence of all component                                    | Yes                        | -         | PMT 0001  |
| Presence of Dust or Foreign particles                        | Nil                        | Nil       | PMT 0065  |
| Dosage with water , cc                                       | 1.9                        | +/-0.2    | PMT 0048  |
| Strokes to prime   | 6                          | Max       | PMT 0048  |
| Dip-tube length below gasket, mm                             | ***                        | +/-2      | Not for Incoming QC<br>Follow Supplier's COA                        |
| Free dip tube length,mm                                      | 97                         | +/-0.2    | PMT0002   |
| Dip tube dimensions mm                                       | OD 5.5<br>ID4.2            | +/-0.2    | PMT0001   |
| Dip tube retention force, lbs                                | 0.8                        | MIN       | Not for Incoming QC<br>Follow Supplier's COA                        |
| End of Dip Tube  | V-cut                      | N.A.      | PMT 0001  |
| Vacuum leakage test<br>(10inch Hg for 10mins at 45 degree C) | To pass                    | N.A.      | PMT0017A  |
| Pump fitment   | As per approved<br>samples | N.A.      | Screw on the pump on bottle until<br>no more tightening is possible |
| ESCR Test  | To Pass                    | N.A.      | PMT 0009  |

|                    |                   |                    |
|--------------------|-------------------|--------------------|
| <b>Prepared By</b> | <b>Checked By</b> | <b>Approved By</b> |
|                    |                   |                    |

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**A) General Remarks** – The pump shall not be deformed/damaged on delivery at production units. It shall be free from dust, dirt, foreign matter, dents and scratches.

**Insert shall be fixed to actuator properly and actuator shall be fixed with pump properly. There shall be no loose actuator, pump or insert.**

**B) Packing Instructions –**

Pumps need to be packaged in a Polybag and then further packed in 5/7 ply corrugated box. Each box shall be of uniform size and shape. Each box shall be closed using 2inch BOPP tape in H-manner. Each unit should be properly marked with the vendor's name, quantity, Batch/Lot no., Mfg. Date and Invoice number and shall be accompanied with Pre-dispatch Inspection (PDI)/ Certificate of Analysis (COA).

**C) Storage Conditions** – It is recommended that normal safety precautions to be taken while handling the product. The bottles shall be stored in a cool and dry place protected from dirt, dust & from direct exposure to sunlight.

**D) Instructions to Vendor –**

1. PDI / COA shall be provided by the supplier with every consignment.
2. Tests are to be carried out either in-house or from approved laboratories.
3. 100% of pump and actuator assembly shall be checked for leakage, pump function and fitment (both pump to actuator and insert with actuator)

| Prepared By | Checked By | Approved By |
|-------------|------------|-------------|
|             |            |             |