| Case name      | Soft and Flexi  | ble        |                                       |
|----------------|---|------------|---------------------------------------|
|                | Breathing Ma  | sks        |                                       |
|                | Studies   |            |                                       |
| Dimensions in  | LBH 70x70x50 mm   |            |                                       |
| mm (L x W x H) | Wall thickness 1.5 to   | 2.0 mm     |                                       |
| Application    | Medical Technology  | -          |                                       |
|                | Design studies  |            |                                       |
| RM process     | Stereolithography   |            |                                       |
| Software       | Pro-E for construction  | n &        |                                       |
|                | Standart RP/RM Soft   | ware       |                                       |
| System         | 3D Systems Viper si <sup>2</sup>  |            |                                       |
| Material       | FlexSL® SE-25   |            |                                       |
| Lead time      | n.a.  |            |                                       |
| (hours/days)   |   |            |                                       |
| Costs          | n.a.  |            |                                       |
| Surface finish | Normal post-processing & laquer technique with FlexSL® SE-2   |            | uer technique with FlexSL® SE-25      |
|                | to obtain a smooth, ed  | dge-free s | urface                                |
| Mechanical     | FlexSL® SE-25 properties:   |            |                                       |
| properties     |   |            |                                       |
|                | Appearance - clear light amber Density [g/cm³] - tba Tensile (Young's) Modulus [MPa] - 20 Tensile Strength at break [MPa] - 2,5 |            |                                       |
|                |   |            |                                       |
|                |   |            |                                       |
|                | Elongation at break [%] - 14,3  |            |                                       |
|                | Additional information, TDS on <a href="https://www.3mat.de">www.3mat.de</a>  |            |                                       |
| Thermal        | n.a.  |            |                                       |
| properties     | n.a.  |            |                                       |
| Any additional | Biocompatible stereolithographic material as functional design  |            |                                       |
| info           | prototypes for medical technology applications  |            |                                       |
| Contact info   | name  |            | Bens; Dr. C. Tille                    |
|                |   |            | · · · · · · · · · · · · · · · · · · · |
|                | organisation  | 3mat       |                                       |
|                | organisation<br>website   | www.3n     | nat.de                                |
|                |   |            |                                       |





<u>Left Picture</u>: Normal post-processing (right part on tabletop) & laquer technique with FlexSL® SE-25 (left part) to obtain a smooth, edge-free surface

**Right Picture**: Bending of the flexible, soft material