

# E1-Aquasol

**envisionTEC**  
**VALIDATED**

Let us  
print your  
part!<sup>1</sup>



**N3XTDIMENSION**<sup>®</sup>  
**BY ARKEMA**

E1-Aquasol resin is ideal for printing molds in a wide variety of industrial applications. The water-soluble 3D printing resin, designed for EnvisionTEC's proprietary Envision One cDLM printing platform, allows industrial manufacturers to shell-cast thin-walled parts with high feature resolution. Thanks to its high water solubility, E-Aquasol resin is an optimal choice for users to seek to avoid the use of more aggressive solvents such as caustic.

This material is the result of a joint collaboration of EnvisionTEC and Sartomer, both leading experts in 3D printing and advanced materials.

| Material Properties <sup>2</sup> |                       |           |
|----------------------------------|-----------------------|-----------|
| Tensile Strength                 | 7.9 MPa               | ISO 527   |
| Elongation at Break              | 2.65 %                | ISO 527   |
| Tensile Modulus                  | 542 MPa               | ISO 527   |
| Flexural Strength                | 16.7 MPa              | ASTM D790 |
| Flexural Modulus                 | 1840 MPa              | ASTM D790 |
| Viscosity @ 30°C                 | 28 cP                 |           |
| Density                          | 1.2 g/cm <sup>3</sup> |           |

### Recommended 3D Printer Family<sup>3</sup>

Envision One cDLM

<sup>1</sup> Learn more at [EnvisionTEC.com/printmypart](https://www.envisiontec.com/printmypart)

<sup>2</sup> All data provided is preliminary and must be verified by the individual user

<sup>3</sup> May not be suitable for all machine models within a 3D printer family. Please refer to specific model online for compatibility.

# E1-Aquasol

## HANDLING

For safe handling information on this product, consult the Safety Data Sheet (SDS)

### Directions for Use

1. This product is light sensitive; exposure to daylight, UV light or artificial lighting should be kept to a minimum during storage and handling
2. Shake or stir E1-Aquasol well before use due to the possibility that the colorants may separate or precipitate over long storage periods
3. For best 3D printing: Mix the 3D resin before each print. Do not leave resin in printer when not in use. Filter the resin after each 3D print before reuse
4. Excess material can be easily wiped away with non-polar solvents.

### Storage

Store product in a cool, dry location, in unopened containers at a temperature between 8°C and 28°C unless otherwise labeled. To prevent contamination of unused product, do not return any material to its original container.



## DISCLAIMERS

The product for which the data provided herein are furnished for informational purposes only and are believed to be accurate and reliable. Nevertheless, EnvisionTEC cannot and will not assume responsibility for the results obtained by others over whose production methods we have no control. thus, it is the user's responsibility to determine the suitability of this product for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling, storage, disposal and use thereof. In light of the foregoing, EnvisionTEC specifically disclaims any and all warranties expressed or implied, including warranties of merchantability, fitness for a particular purpose and free from claims of third party patent infringement, arising from the sale, possession, handling, storage, disposal, transportation or use of this product.

EnvisionTEC specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits. Neither the product, nor the data or discussion herein of various processes for which, are to be interpreted as an express or implied license under any EnvisionTEC patents. EnvisionTEC recommends that any and all proposed commercial application(s) using this product be evaluated for reproducibility in the exact manner and on the production equipment with which it is intended to be used before repetitive commercial production use, using this data as a guide.

**envisionTEC**

Gladbeck, Germany • Dearborn, Michigan