



**A SOLUBLE SUPPORT FILAMENT THAT  
WORKS WITH HIGH-TEMPERATURE  
BUILD MATERIAL.**

**WHY NOT?**

**Addigy®**



We are introducing a unique engineering thermoplastic filament for additive manufacturing, which is soluble and suitable for high temperature materials such as PEEK. **Addigy® FPC SOL1** is easy to print without pre-treatment, heat-resistant up to 205 °C and has a good chemical solubility in ethyl acetate. Our soluble support material offers many advantages over commonly used break-away support materials:

## Good final part quality

- Soluble support material allows smooth surfaces (100% infill of support structures possible)
- Geometric freedom of final part
- Transparency of material supports the clear visual differentiation of final part from the support structures
- Complete dissolving of support structures

## More convenient post-treatment

- Eliminates manual post-processing to smooth surface
- Lower injury risk for employees during manual break-away of support structures
- Reduced scrappage due to less damage during manual break-away of support structures

## Material data and compatibility & dissolving process

Addigy® FPC SOL1 000000 HT	
Color	Transparent, almost colorless
Vicat softening temperature	205 °C
Printing recommendations	Build room temperature: 200 °C Bed temperature: 200 °C Nozzle: 0.4 mm Layer height: 0.2 mm Nozzle temperature: 330 °C Nozzle speed: 25 mm/s
Mechanical data of printed part after dissolving process	No deterioration after 120 min solvent exposure in ultrasonic bath
Tested compatible high temperature material	PEEK
Dissolving	Ethyl acetate (best dissolving results): <ul style="list-style-type: none"><li>• Dissolving time depends on the geometry of the printed part</li><li>• As reference: 1 cm<sup>3</sup> of 100% infilled material takes about 35 minutes to fully dissolve in ultrasonic bath</li></ul>

Filament is available in 1.75 mm in different sample sizes for testing.

## Lower process costs & effort

- Printing: direct use of support material (no pre-processing e.g. drying needed)
- Dissolving: fast chemical dissolving of support structures & simple step-by-step guidance in clear process documentation

## Sustainability

- Reuse of solvent possible via simple distillation process

To see more examples of **Addigy®** in action, go to our website and have a look for yourself:



## Contact

If we have piqued your interest, please reach out to our Covestro additive manufacturing colleagues:

[additive.manufacturing@covestro.com](mailto:additive.manufacturing@covestro.com)



Covestro Deutschland AG  
Kaiser-Wilhelm-Allee 60  
51373 Leverkusen  
Germany

[solutions.covestro.com](https://solutions.covestro.com)  
[info@covestro.com](mailto:info@covestro.com)

The manner in which you use our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations, is beyond our control. Therefore, it is imperative that you test our products to determine suitability for your processing and intended uses. Your analysis must at least include testing to determine suitability from a technical, health, safety, and environmental and regulatory standpoint. Such testing has not necessarily been done by Covestro, and Covestro has not obtained any approvals or licenses for a particular use or application of the product, unless explicitly stated otherwise. [EMEA only: If the intended use of the product is for the manufacture of a pharmaceutical/ medicinal product, medical device<sup>1</sup> or of pre-cursor products for medical devices or for other specifically regulated applications which lead or may lead to a regulatory obligation of Covestro, Covestro must explicitly agree to such application before the sale.] Any samples provided by Covestro are for testing purposes only and not for commercial use. Unless we otherwise agree in writing, all products are sold strictly pursuant to the terms of our standard conditions of sale which are available upon request. All information, including technical assistance is given without warranty or guarantee and is subject to change without notice. It is expressly understood and agreed by you that you assume and hereby expressly release and indemnify us and hold us harmless from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance, and information. Any statement or recommendation not contained herein is unauthorized and shall not bind us. Nothing herein shall be construed as a recommendation to use any product in conflict with any claim of any patent relative to any material or its use. No license is implied or in fact granted under the claims of any patent. These values are typical values only. Unless explicitly agreed in written form, they do not constitute a binding material specification or warranted values.

<sup>1</sup> Please see the "Guidance on Use of Covestro Products in a Medical Application" document.  
Edition: 2021 · Printed in Germany