## 1. PRODUCT IDENTIFICATION

TRADE NAME Extrudr DuraPro ABS

MANUFACTURER FD3D GmbH

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USE OF PRODUCT Terpolymer, suitable for 3D printing filament

## 2. EUROPEAN UNION FOOD CONTACT

Regulation (EU) 10/2011 Annex IV

This certificate states that our product called Extrudr ABS is in full compliance with the applicable requirements of CFR 21 §181.32 of US FDA (Food and Drug Administration) for use in contact with food. Therefore, Extrudr ABS can be used in applications for direct/indirect food contact under the FDA regulation.

We hereby certify that Extrudr ABS complies with the specification according to EU Directive 2009/48/EC - EN-71, Part 3: 2013

| SUBSTANCES     | LIMITS (MG/KG) | POWDER TYPE | LIQUID TYPE |
|----------------|----------------|-------------|-------------|
| Antimony (Sb)  | 45             | 11.3        | 560         |
| Arsenic (As)   | 3.8            | 0.9         | 47          |
| Barium (Ba)    | 1,500          | 375         | 18,750      |
| Cadmium (Cd)   | 1.3            | 0.3         | 17          |
| Cadmium (Cd)   | 37.5           | 9.4         | 460         |
| Chromium (Cr)  | 0.02           | 0.005       | 0.2         |
| Mercury (Hg)   | 13.5           | 3.4         | 160         |
| Lead (Pb)      | 7.5            | 1.9         | 94          |
| Selenium (Se)  | 37.5           | 9.4         | 460         |
| Aluminium (AI) | 5,625          | 1,406       | 70,000      |
| Boron (B)      | 1,200          | 300         | 15,000      |
| Cobalt (Co)    | 10.5           | 2.6         | 130         |
| Copper (Cu)    | 662.5          | 156         | 7,700       |
| Manganese (Mn) | 1,200          | 300         | 15,000      |
| Nickel (Ni)    | 75             | 18.8        | 930         |

| Strontium (Sr)   | 4,500  | 1,125 | 56,000  |
|------------------|--------|-------|---------|
| Tin (Sn)         | 15,000 | 3,750 | 180,000 |
| Organic Tin (Sn) | 0.9    | 0.2   | 12      |
| Zinc (Zn)        | 3,750  | 938   | 46,000  |

The overall and specific migration tests carried out under recommended conditions (10 days/40°C), using the food stimulants Ethanol 50%, Acetic acid 3% and Vegetable oil, show that the polymer meets the migration limits required by EU legislation.

## 3. REACH & ECHA

The material is free of Substance of Very High Concern (SVHS) listed in the REACH Candidate List by the ECHA on the 11. December 2022 is present in a concentration above 0,1%.

## 4. LIABILITY LIMITATION

Please note that this compound has not been tested for trace amounts of the substances aforementioned or listed within the regulations. However, based on the information obtained from upstream suppliers there is no reason to expect any of the substances listed to be present within this compound. The values listed have been established on standardized test specimens at standard temperature and humidity conditions. The figures should be considered as guide values only. Under certain conditions the processing conditions can have a significant influenceon the properties.

FD3D GmbH shall not be liable for the use of this information or of any product, method or equipment mentioned. Customers must undertake their own determination of this product's suitability and completeness for their own use, for the protection of the environment, for the health and safety of their employees and purchasers of their products. No warranty is made of the merchantability or fitness of any product, and nothing herein waives any of the seller'sconditions of sale.

