

Biodolomer® F – recommended end-of-life options

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To whom it may concern.

GAIA BioMaterials offer a number of different PLA-free, mineral filled Biodolomer® grades for film applications, such as bags, sachets, aprons, sacks, packaging. Their key features, compared to grades containing PLA, include increased heat stability and improved biodegradability. These Biodolomer® grades are certified home compostable in thicknesses of up to 70 microns and certified for industrial composting in thicknesses up to 120 microns:

Home compost certification:

TÜV Austria registration no: TA8022004937 (resins)

TÜV Austria registration no: TA8021401005 (bags)

Industrial composting:

Din Certco registration no: 9K0054 (resins)

Furthermore, a study performed at the ETH Zürich* shows that PBAT (the main component of GAIA's film grades) does not result in any microplastics in soil, as it biodegrades completely).

In cases where no composting option is available, a European Union commissioned LCA study** has shown that replacing fossil plastics with Biodolomer® can reduce CO2 emissions by up to 80% when incinerated, as compared with fossil plastics.

The recommended end-of-life options for products made from Biodolomer F – depending on material thickness – are thus as follow:

- Home composting (up to 70 microns)
- Industrial composting (up to 120 microns)
- Other Household waste (marked “7”)



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* “Biodegradation of synthetic polymers in soils: Tracking carbon into CO2 and microbial biomass” Zumstein et al., Sci. Adv. 2018;4: eaas9024

** Please find the LCA report here: https://gaiabiomaterials.com/datasheet/LCA_for_Biodolomer_Final_version.pdf