

Recommendation

**Materials** 

**Oxo-degradable Materials** 



Paper, wood, woody biomass	0	FSC-certified materials are recommended from the perspective of biodiversity. For materials that have not been certified, it is necessary to check for a logging permit from the local government, etc., which indicates that the material is not illegally logged. Recycled paper, wood chips and powder to be disposed are also recommended.
Palm, corn, sugarcane, soybean, rice	0	Food should be consumed as food, not produced exclusively for the use of the material; only use of waste food such as expired, pressed residues, waste rice, etc. is allowed. In addition, the material should be certified by an ISEAL Alliance member, such as RSPO for palm, Bonsucro for sugarcane, and RTRS for soybeans, to be sustainable in terms of biodiversity, environmental impact, and human rights. See also below for more information on biomass.
Reed, sedge, bamboo	Δ	Confirmation of a logging permit from the local government or other authority indicating that the logging is not illegal is required. In addition, the use of riverside reeds and sedge is not allowed, as they are beneficial to the preservation of biodiversity in freshwater systems. Also, in terms of hygiene, since bamboo is susceptible to the growth of highly poisonous red mold, it should not be used for tableware without mold treatment. See also below for more information on biomass.
Silicone, high-density polyethylene (HDPE)	©	Reuse is recommended as it improves strength. However, for products to be used on board aircraft, sufficient consideration should be taken to reduce weight.
Recycled materials	©	Recycled materials such as recycled paper, recycled cardboard, recycled plastic, recycled aluminum, and recycled glass by material/chemical recycling are strongly recommended because they emit less CO2 when recycled/manufactured than newly manufactured materials. Since the appearance of the product does not change, a note such as "100% recycled material" should be included on the product. In addition, it is desirable to have a certification (ISCC/GRS) proving that the raw material is actually made from recycled materials, or ISO14021 data assurance by a third party.
Easily recyclable material (A-PET/aluminum/ standard drink bottles)	©	Transparent A-PET is recommended because it emits less CO2 when burned and is easily recycled. Aluminum emits less CO2 when recycled than steel and is as strong as steel, so lighter aluminum cans are recommended, especially for in-flight supplies. In addition, beverage bottles for wine, liquor, and other beverages have standards (size, color, etc.) for recycling and re-filling, hence designing bottles that do not meet these standards should be avoided.
Biomass 100% materials	0	If national/regional recycling infrastructure is not in place and the product is incinerated, 100% biomass is selected from the perspective of environmental impact. See above for sustainability of the raw materials.
Compostable Materials	×	Even if there is official proof of compost degradability, since there is almost no infrastructure for compost degradation including overseas, it actually cannot be degraded, leading to misperception by customers. Degradability of waste food in composting facilities depends on the machine performance, so confirmation is required.

Note

Not allowed because it does not decompose and pollutes the ocean. Use is prohibited in Europe and the United States.