

Design for sustainability (DfS) scorecard



With our DfS scorecard, we drive sustainability improvement during the product development process through multiple product sustainability criteria divided into seven impact areas.

Ultra pure MagPrep® Viral RNA & cfDNA Isolation Kits

Designed for fast and efficient nucleic acid isolation from most biological fluids in both manual or high-throughput automated platforms without the need for Proteinase K or sample heating



Impact areas

Results



MATERIALS

Average mass reduction of more than 80% compared to similar test kits is achieved by eliminating the need for auxiliary materials and the increased number of tests that can be performed per kit.



SUPPLIERS & MANUFACTURING

100% of the product's Tier 1 upstream supply chain and manufacturing are covered by suppliers who participate in the Together for Sustainability initiative with a valid assessment.



PACKAGING

Packaging mass reduced by more than 30% on average compared to similar test kits as a result of optimized and simplified packaging design.



ENERGY & EMISSIONS

MagPrep does not require any laboratory equipment for the shaking, heating or liquid handling to perform the workflow, avoiding energy requirements between 0.2 to 0.6 KWh per kit.
The kit can be shipped and stored at ambient temperature, avoiding the energy associated with cold storage.



WATER

No change compared to baseline product in consideration of our DfS criteria.



USABILITY & INNOVATION

Faster process can be run in 18 minutes, reducing time between 30% to 50% compared to baseline.
Simpler process, which does not require Proteinase K or heat, and is compatible with automation.



CIRCULAR ECONOMY

No change compared to baseline product in consideration of our DfS criteria.

Baseline product: Competitor kits - viral RNA and cf DNA kits (MagMAX Cell-Free DNA, CytivaSera-XtractaVirus/Pathogen, MagMAX Viral)