



May 18, 2020

Ms. Ga-Young Park
Product Manager for Appliances
ENERGY STAR Labeled Products
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington DC, 20004

Sent by e-mail to appliances@energystar.gov.

Re: ENERGY STAR Residential Dishwasher Version 7.0 Draft 1 Specification

Dear Ms. Park:

Samsung Electronics America, Inc. (Samsung) respectfully submits these comments on the ENERGY STAR Residential Dishwasher Version 7.0 Draft 1 Specification (Draft Specification).

A world leader in technology, Samsung is one of the leading home appliance brands in the U.S. committed to providing energy efficient products to U.S. consumers. Samsung has won the ENERGY STAR Partner of the Year Award for Sustained Excellence seven times, including in 2020. Samsung has also won several ENERGY STAR Emerging Technology Awards, including the 2020 Award for Advanced Adaptive Compressors, 2017 Award for Innovative Refrigerant Systems, and 2013 Award for Advanced Clothes Dryers.

ENERGY STAR offers value to consumers by providing a way to identify energy efficient products and offering other useful energy saving tips on its website. This is why Samsung is proud to support the program. We appreciate EPA's proactive work with stakeholders to maintain the strength of the ENERGY STAR program through brand awareness and development of specifications.

I. Samsung Agrees that the Draft Specification Scope Should Ensure a Product Performs its Basic Function

Samsung agrees with EPA's proposal to limit the scope of the Draft Specification to products that adequately perform their basic cleaning function. Samsung agrees that requiring a minimum level of cleaning functionality is essential to protect and enhance an ENERGY STAR certified product's basic function, which is aligned with ENERGY STAR's guiding principles.¹ As we have previously shared in comments regarding draft specifications for other product categories, Samsung believes consumers must be able to trust that the ENERGY STAR brand signifies energy efficiency without compromising product performance. This is especially important for those consumers who want innovative products that perform their basic function effectively while saving energy and water. In particular, the modes of operation in which appliances are

¹ See ENERGY STAR® Products Program, Strategic Vision and Guiding Principles, May 14, 2012, p. 3

tested – generally, the default mode – should perform at a minimum level of acceptable functionality, or else consumers may be dissatisfied and instead use more energy and water intensive modes, unknowingly sacrificing energy efficiency. Samsung believes the amended scope EPA proposes in the Draft Specification will deter product configurations from achieving efficiency by compromising on performance in the tested mode.

II. Samsung Believes ENERGY STAR Should Require the Use of Soil Sensor Systems in Version 7.0 of the Specification

In addition to the minimum cleaning test ensuring the product performs its basic function, Samsung believes the scope of the Draft Specification should also require the use of soil sensor systems to demonstrate that a product meets a basic level of cleaning functionality. Soil sensor systems in dishwashers are designed to deliver acceptable levels of cleaning performance under varying levels of soiling load conditions.²

Soil sensor systems currently represent the best available technology for maintaining cleaning functionality while also providing energy and water efficiency benefits. As ENERGY STAR specifications are intended to evolve with technology, Samsung believes now is an appropriate time to limit certification to those models with soil sensor technology. As new innovations that can provide for greater efficiency reach the market, ENERGY STAR specifications should incorporate them when feasible. This helps to maintain the integrity and importance of the ENERGY STAR program.

III. EPA Should Consider Adding an Extra Heavy Soiling Level in the Test Procedure to Encourage Consumers Not To Pre-rinse

Samsung appreciates EPA’s information and education efforts to discourage the consumer practice of pre-rinsing dishes before loading them into dishwashers. EPA encourages “scrape don’t rinse” which, according to EPA, can save up to 20 gallons of water.³ We agree that pre-rinsing drastically increases the water and energy use beyond what the dishwasher uses and what the test procedure measures today. According to Consumer Reports, pre-rinsing can easily waste more than 6,000 gallons of water per household each year.⁴ Significant water and energy savings could result if consumers avoid the practice of pre-rinsing.

Consumers may often pre-rinse as they do not trust their dishwashers will provide acceptable cleaning performance without pre-rinsing. The relatively low soiling levels in the current Department of Energy (DOE) test procedure, even under the heavy soil condition, appear to

² The Department of Energy has long recognized the value of soil sensor systems in delivering acceptable cleaning performance while maximizing efficiency. See Energy Conservation Program for Consumer Products: Test Procedure for Dishwashers, 67 Fed. Reg. 56,235 (Sept. 3, 2002) (“The intent of the design is to use information to improve wash performance and reduce energy consumption when appropriate.”)

³ https://www.energystar.gov/products/appliances/dishwashers/best_practices

⁴ <http://www.consumerreports.org/cro/news/2011/11/12-low-cost-ways-to-save-energy-and-money-now/index.htm>;
<http://www.consumerreports.org/cro/news/2012/04/stop-pre-rinsing-and-let-the-dishwasher-do-its-job/index.htm>;
See also <http://www.consumerreports.org/cro/news/2014/04/6-ways-to-save-energy-and-money-right-now/index.htm>

reflect an assumption that consumers practice pre-rinsing. Moreover, the research supporting the current DOE test procedure is almost 20 years old, and may not align with current consumer practices.⁵

Since EPA can add additional requirements to the DOE test procedure for ENERGY STAR specifically, Samsung proposes that EPA consider adding an additional requirement in the Draft Specification for an extra heavy soil load per ANSI/AHAM DW-1-2010, which should also meet the minimum cleaning test.⁶ The extra heavy soil load requirement – in addition to the minimum cleaning test – would together help ensure that consumers’ dishes are cleaned by dishwashers without pre-rinsing. Thus, the extra heavy soil load requirement will provide consumers further confidence not to pre-rinse because dishwasher designs would adapt to clean effectively without pre-rinsing. This would result in significant water and energy savings under real-world consumer usage.

IV. Samsung Agrees that Minimum Efficiency Requirements Should be Revised to Maintain Market Differentiation for ENERGY STAR

Samsung appreciates EPA’s recognition that specifications should require “efficiency levels reflective of the top 25% of models available on the market when the specification goes into effect.”⁷ As such, we applaud EPA’s proposed revisions to the minimum energy and water efficiency requirements in the Draft Specification. Seventy-eight models from numerous manufacturers already meet the Most Efficient 2020 criteria – identical to the criteria being proposed for ENERGY STAR in the Draft Specification – demonstrating that the Draft Specification is both technologically and economically feasible while maintaining a minimum level of cleaning functionality.^{8,9} Given that the penetration of ENERGY STAR qualified dishwashers in the marketplace has grown to 90%, Samsung agrees it is appropriate for EPA to revise the efficiency requirements in the Draft Specification to recognize the most energy efficient products.¹⁰

V. The ENERGY STAR Dishwasher Category is Important for the Program and Helps Consumers Save Money on Energy

Samsung believes that the ENERGY STAR category for dishwashers is important for helping to reduce consumers’ energy costs in a key appliance category. EPA notes that under the Draft Specification, an ENERGY STAR dishwasher would save 804 kWh of electricity and 4,644 gallons of water over its lifetime compared to a dishwasher that only meets the DOE’s minimum energy efficiency standard.¹¹ In aggregate, the ENERGY STAR dishwasher category would also have a significant impact on the environment through reduced greenhouse gas emissions. These

⁵ Review of Survey Data to Support Revisions to DOE’s Dishwasher Test Procedure Date: December 18, 2001

⁶ ANSI/AHAM DW-1-2010 (Household Electric dishwashers) – 10 place settings

⁷ Strategic Vision and Guiding Principles, p.3

⁸ Most Efficient 2020, Recognition Criteria, Dishwashers

⁹ <https://www.energystar.gov/most-efficient/me-certified-dishwashers>

¹⁰ ENERGY STAR Residential Dishwasher Version 7.0 Draft 1 Specification, Cover Memo

¹¹ Stakeholder Webinar, March 26, 2020, ENERGY STAR Residential Dishwasher Version 7.0 Draft 1 Specification

are important goals for the ENERGY STAR program and we believe the Draft Specification furthers these goals.

Moreover, ENERGY STAR is a top driver of consumer purchasing decisions for dishwashers. The ENERGY STAR dishwasher category is important to Samsung, the marketplace and consumers and therefore, we recommend that it be implemented in a robust way, as described above. Samsung appreciates the opportunity to comment on EPA's ENERGY STAR Residential Dishwasher Version 7.0 Draft 1 Specification. We would gladly welcome the opportunity to discuss these matters further.

Respectfully submitted,

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