

State of California
AIR RESOURCES BOARD

Small Off-Road Engine Evaporative Emission System Components
Executive Order Q-13-015

Dakota Molding, Inc.
Innovative Products

WHEREAS, Pursuant to California Health and Safety Code, sections 39600, 39601, and 43013, the California Air Resources Board (ARB) has established a certification process for evaporative emission system components designed to control gasoline emissions from small off-road engines, as described in California Code of Regulations, title 13, section 2767.1;

WHEREAS, Pursuant to California Health and Safety Code, section 43013, ARB has established criteria and test procedures for determining the compliance of evaporative emission system components with the design requirements in Cal. Code Regs., title 13, section 2754;

WHEREAS, Pursuant to Cal. Code Regs., title 13, section 2767.1, ARB Executive Officer may issue an executive order (EO) if he determines that small off-road engine evaporative emission system component or innovative product conforms to the applicable performance requirements set forth in Cal. Code Regs., title 13, section 2754 and 2755;

WHEREAS, Pursuant to California Health and Safety Code, sections 39515 and 39516, ARB Executive Officer issued EO G-05-008 delegating to the Chief of ARB's Monitoring and Laboratory Division (MLD) the authority to certify small off-road engine evaporative system components and innovative products; and

WHEREAS, On February 26, 2013, Dakota Molding, Inc. submitted an application for certification as an innovative product under Cal. Code Regs., title 13, section 2767(c) for model 1700 HSL resin material for rotational molded fuel tanks.

NOW, THEREFORE, I, Michael T. Benjamin, Chief of MLD, find that fuel tanks produced using Dakota Molding, Inc. model 1700 HSL resin material and following the process and material specifications set out in Attachment A constitute innovative fuel tanks pursuant to Cal. Code Regs., title 13, section 2767(c). Fuel tanks produced following Dakota Molding, Inc. process and material specifications are hereby deemed equivalent to those tanks listed in Cal. Code Regs., title 13, section 2752(a)(5). This finding is based on Dakota Molding, Inc. demonstrating that such fuel tanks have a permeation rate less than 1.5 grams per square meter per day as set forth in Cal. Code Regs., title 13, section 2754, when tested at a constant temperature of 40°C pursuant to TP-901 using an approved test fuel of California Phase 2 Certification Fuel.

IT IS ORDERED AND RESOLVED that no tank permeation data is required to be submitted in the certification process for equipment using the Dakota Molding, Inc. model 1700 HSL resin material rotational molded fuel tanks.

IT IS ORDERED AND RESOLVED that all fuel tanks made from Dakota Molding, Inc. model 1700 HSL resin material with minimum barrier and nominal wall thicknesses equal to or greater than the value listed in Table 1 incorporated herein, are certified for use in small off-road equipment.

Table 1
Specifications for Dakota Molding, Inc. Model 1700 HSL Resin Material Fuel Tanks

Minimum barrier thickness (mm)	Nominal overall tank thickness (mm)
3.6	Equal to or greater than 3.6

IT IS FURTHER ORDERED that Dakota Molding, Inc. shall provide a warranty to equipment manufacturers purchasing their model 1700 HSL resin material rotational molded fuel tanks. The warranty must conform to the requirements of Cal. Code Regs., title 13, section 2760.

IT IS FURTHER ORDERED that the certified model 1700 HSL resin material rotational molded fuel tanks shall be installed in accordance with the manufacturer's installation and use instructions for the tanks. A copy of this EO and the fuel tanks' installation and use instructions shall be provided to manufacturers purchasing Dakota Molding, Inc. model 1700 HSL resin material rotational molded fuel tanks for installation on small off-road engines and equipment introduced into commerce in California.

IT IS FURTHER ORDERED that Dakota Molding, Inc. model 1700 HSL resin material rotational molded fuel tanks shall be clearly identified by a permanent identification that allows ARB to identify the manufacturer's name, EO number, and model number.

IT IS FURTHER ORDERED that any modification of the Dakota Molding, Inc. approved process and material specifications for producing model 1700 HSL resin material rotational molded fuel tanks is prohibited. Any alteration or modification of the process or material specifications set out in Attachment A of this EO shall require the manufacturer to apply for a new EO.

IT IS FURTHER ORDERED that the Dakota Molding, Inc. model 1700 HSL resin material rotational molded fuel tanks shall be compatible with fuels in common use in California at the time of certification and any modifications to comply with future California fuel requirements shall be approved in writing by the Executive Officer or the Executive Officer's delegate.

IT IS FURTHER ORDERED that the innovative product certification of the Dakota Molding, Inc. model 1700 HSL resin material rotational molded fuel tanks can be referenced in certification applications for small off-road engines and equipment that

use small off-road engines unless the Executive Officer finds that the Dakota Molding, Inc. model 1700 HSL resin material rotational molded fuel tanks no longer meet the performance requirements set forth in Cal. Code Regs., title 13, section 2754, when tested pursuant to Cal. Code Regs., title 13, section 2765.

Executed at Sacramento, California, this 28th day of April 2013.



Dr. Michael T. Benjamin, Chief
Monitoring and Laboratory Division

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Attachment A

1.0 Overall Material Specification

Material	Dakota 1700HSL
Material composition	Single layer Impact Modified Nylon 6 for rotational molding
Barrier Layer	Impact Modified nylon 6
Color	Black
Maximum regrind	Virgin Material only

2.0 Tank design

Tank minimum wall	3.6mm
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3.0 Rotational molding process

Material dryness	less than .25%	by wt
Curing Time/temperature process	15-20 min @ 600-700 F	
Cure verification	Visual after molding	
Arm/Plate rotations ratio	4:1 approx	
Reversals	4.1-5.1	minutes
Cooling process	15-20	minutes