



## The Rotomolded Solution For Meeting Stricter CARB/EPA Fuel Permeation Regulations

**Target Markets: Motorcycle, Recreational Vehicle,  
SORE (Small Off-Road Equipment), Agricultural, Industrial,  
Lawn and Garden, Marine and Automotive**

- CARB (California Air Resources Board) exempt for small off road equipment market (SORE)
- Unique composite structure
- Ultra-low permeation to fuel CE10 (10% Ethanol)
  - Meets EPA requirements
- Excellent permeation resistance to higher alcohol content fuels
- Two layer composite system with excellent adhesion
  - Critical to ensure low permeation, especially to alcohol containing fuels
  - No loss of adhesion when tank is drilled, tapped or when mechanical inserts are installed
- Passes SAE J1241 motorcycle fuel tank lateral impact test
- Passes SAE J288 snowmobile fuel tank impact test
- Passes US Coast Guard regulation for permanently installed marine fuel tanks\*
- Excellent impact and toughness
- Good strength and flexibility
- Salt and hydrolysis resistance
- Cost competitive and easily pigmented

\* 40 gallon marine fuel tank provided by Solar Plastics Inc.  
and testing done by Imanna Labs



## Regulations and Fuel Tank Permeation Requirements

| Applications                         | Agency | Fuel | Temperature | Limit  | Timing Model/ Year | PetroSeal™ Results |
|--------------------------------------|--------|------|-------------|--|--------------------|--------------------|
| Motorcycle and Recreational Vehicles | EPA    | CE10 | 28°C        | <1.5g/m <sup>2</sup> /day                              | 2008               | Passes             |
| Small Off Road Equipment             | CARB*  | C    | 40°C        | <2.5g/m <sup>2</sup> /day<br><1.5g/m <sup>2</sup> /day | 2008<br>2012       | Passes<br>Passes   |
| Marine and Lawn & Garden             | EPA    | CE10 | 28°C        | <1.5g/m <sup>2</sup> /day                              | 2010**             | Passes             |

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\* California Air Resources Board

\*\* Expected timing for this new regulation

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