

Authorized Materials for Fuel Alcohol

Under 27 CFR 19.1005(b), the following materials are approved to render spirits unfit for beverage use and thus acceptable for withdrawal from alcohol fuel plants as fuel alcohol:

1. The materials listed in 27 CFR 19.1005(c), in the quantities specified there.
2. The following additional materials, in the following quantities, corresponding to the following specifications:

Material	Quantity added to 100 gallons of distilled spirits	Specifications
Natural Gasoline	2 gallons or more	1. Natural gasoline (drip gas) is a mixture of butane, pentane, and hexane hydrocarbons extracted from natural gas. 2. Distillation range: No more than 10% of the sample may distill below 97° F.; at least 50% shall distill at or below 156° F.; and at least 90% shall distill at or below 209° F.
Ethyl Tertiary Butyl Ether (ETBE)	2 gallons or more	
Raffinate	2 gallons or more	1. Octane (R+M/2): 66-70 2. Distillation, in Degrees F: 10%: 120-150 50%: 144-180 90%: 168-200 End Point: 216-285 3. API Gravity: 76-82 4. Reid Vapor Pressure: 5-11
Naphtha	2 gallons or more	1. API Gravity @ 60/60 Degrees F: 64-70 2. Lb/Gal: 5.845-6.025 3. Density: .7022-.7238 4. Reid Vapor Pressure: 8 P.S.I.A. Max. 5. Distillation, in Degrees F: I.B.P.: 85 Max. 10%: 130 Max. 50%: 250 Max. 90%: 340 Max. End Point: 380 6. Copper Corrosion: 1

		7. Sabolt Color: 28 Min.
Straight Run Gasoline (TTB Rul. 2008-2)	2 gallons or more	<p>1. Straight run gasoline is a mixture consisting predominantly (greater than 60% by volume) of C4, C5, C6, C7 and/or C8 hydrocarbons, and is either (1) a petroleum distillate coming straight from an atmospheric distillation unit without being cracked or reformed or (2) a condensate coming directly from an oil/gas recovery operation.</p> <p>2. API gravity: 72° Min., 85° Max.</p> <p>3. Reid vapor pressure: 15 psi Max.</p> <p>4. Sulfur: 120 ppm Max.</p> <p>5. Benzene: 1.1% by volume Max.</p> <p>6. Distillation:</p> <p style="padding-left: 40px;">10%: 97° F Min., 158° F Max.</p> <p style="padding-left: 40px;">50%: 250° F Max.</p> <p style="padding-left: 40px;">Final Boiling Point: 437° F Max.</p>
Toluene	5 gallons or more	See 27 CFR 21.132.