

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	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 1. Octane (R+M/2): 66-70 2. Distillation, in Degrees F: <table style="margin-left: 40px;"> <tr><td>10%:</td><td>120-150</td></tr> <tr><td>50%:</td><td>144-180</td></tr> <tr><td>90%:</td><td>168-200</td></tr> <tr><td>End Point:</td><td>216-285</td></tr> </table> 3. API Gravity: 76-82 4. Reid Vapor Pressure: 5-11 	10%:	120-150	50%:	144-180	90%:	168-200	End Point:	216-285		
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50%:	144-180											
90%:	168-200											
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Naphtha	2 gallons or more	<ol style="list-style-type: none"> 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: <table style="margin-left: 40px;"> <tr><td>I.B.P.:</td><td>85 Max.</td></tr> <tr><td>10%:</td><td>130 Max.</td></tr> <tr><td>50%:</td><td>250 Max.</td></tr> <tr><td>90%:</td><td>340 Max.</td></tr> <tr><td>End Point:</td><td>380</td></tr> </table> 6. Copper Corrosion: 1 7. Sabolt Color: 28 Min. 	I.B.P.:	85 Max.	10%:	130 Max.	50%:	250 Max.	90%:	340 Max.	End Point:	380
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10%:	130 Max.											
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Toluene	5 gallons or more	See 27 CFR 21.132.										