

# Organoleptic Evaluation

## Fit vs Unfit

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Nonbeverage Products Laboratory

# Sample #1

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A few things to think about as you taste the sample...

- Could an average person mistake this sample for an alcoholic beverage?
    - Not whether or not you like it!
  - You are not trying to find flavor characteristics or identify the flavor.
    - Simply, is it fit or unfit?
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# Sample #1

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- This sample is actually an alcoholic beverage!
  - You just tasted a Grappa
- Tasting actual alcoholic beverages can retune your expectations.

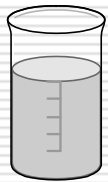
Example: pepper flavor vs a pepper vodka

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# Tasting Protocol

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- Samples with more than 15% alcohol (v/v) are diluted to that level with tap water.



- Dilution based on the upper end of the range for alcohol content in item 10 on form TTB F 5154.1.

- Samples that contain 15% alcohol (v/v) or less are tasted without dilution.
- Six or more panelists are required for organoleptic analysis.



# Tasting Protocol

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- Two-thirds of the panelists must agree that the sample is unfit for beverage purposes.
- Results of the taste panel are to be recorded in box 13\* of TTB Form 5154.1 with the following statement:

“This product was found to be unfit for beverage purposes. It was subjected to organoleptic analysis by a taste panel of \_\_\_ panelists, \_\_\_ of whom agreed on the determination.”

\* This statement will be entered in box #18 under the new regulations.

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# Sample #2

Lab determined  
this sample to be  
**FIT** for beverage  
purposes.

Formula approval: OMB No. 1512-0095 (09/30/98)

DEPARTMENT OF THE TREASURY BUREAU OF ALCOHOL, TOBACCO AND FIREARMS FORMULA AND PROCESS FOR NONBEVERAGE PRODUCT <small>(See instructions attached-Prepare in triplicate, except if manufactured abroad)</small>																				
3. NAME OF PRODUCT. <b>Nat Grape WONF</b>		4. CHECK IF SAMPLE WILL BE SUBMITTED <input checked="" type="checkbox"/>																		
6. NAME OF THE MANUFACTURER & ADDRESS WHERE PRODUCTS WILL BE PRODUCED ( if multiple production sites, list other addresses on reverse). <b>Company Inc. 1111 Road Way City, State 11111</b>		5. NUMBER OF DAYS TO COMPLETE PROCESS <b>1</b>																		
7. CHECK KIND OF PRODUCT: <input type="checkbox"/> MEDICINE/MEDICINAL PREPARATION <input checked="" type="checkbox"/> FLAVOR/FLAVORING EXTRACT <input type="checkbox"/> FOOD PRODUCT <input type="checkbox"/> PERFUME		8. FORMULAS SUPERSEDED.																		
9. ELIGIBLE ABSOLUTE ALCOHOL VOLUME USED. <small>(See instructions)</small> <b>29.45</b>		10. ALCOHOL CONTENT BY VOLUME OF FINISHED PRODUCT. <b>29.45 ± 1.5</b>																		
11. IF MADE WITH RECOVERED SPIRITS: ELIGIBLE PLUS RECOVERED ABSOLUTE ALCOHOL BY VOLUME USED. <small>(See instructions)</small>	12. IF FINISHED PRODUCT IS TO BE USED IN ALCOHOLIC BEVERAGES: A. DOES PRODUCT CONTAIN NATURAL FLAVORING? (YES OR NO) B. DOES PRODUCT CONTAIN GREATER THAN 0.1% ARTIFICIAL FLAVORING(Excluding Vanillin, Ethyl Vanillin,Maltol, Ethyl Maltol)? <small>(Yes or No)</small> C. STATE PARTS PER MILLION IN PRODUCT OF: VANILLIN ETHYL VANILLIN <b>SYNTHETIC MALTOL</b> ETHYL MALTOL D. DOES PRODUCT CONTAIN A COLOR ADDITIVE? IF YES, WHICH? E. ARE ALL INGREDIENTS APPROVED BY FDA FOR USE WITHOUT LIMITATION OR RESTRICTION? (YES OR NO)																			
13. FORMULA AND PROCESS <small>(Use Additional Space on Reverse if Necessary)</small>  <table border="0"> <tr><td>Alcohol 190 Proof</td><td>25.4 g (31.2 mL)</td></tr> <tr><td>Pomegranate Juice</td><td>10.4 g</td></tr> <tr><td>Grape Juice</td><td>26.3 g</td></tr> <tr><td>N Ethyl Propionate</td><td>0.6 g</td></tr> <tr><td>N Trans 2-hexenal</td><td>0.6 g</td></tr> <tr><td>Water</td><td>31.5 g</td></tr> <tr><td>Sugar</td><td>5.2 g</td></tr> <tr><td>Yield</td><td>100 g</td></tr> <tr><td></td><td>100.63 mL</td></tr> </table> <p>SIMPLE MIXTURE</p>			Alcohol 190 Proof	25.4 g (31.2 mL)	Pomegranate Juice	10.4 g	Grape Juice	26.3 g	N Ethyl Propionate	0.6 g	N Trans 2-hexenal	0.6 g	Water	31.5 g	Sugar	5.2 g	Yield	100 g		100.63 mL
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14. CONTACT PERSON <small>(Include Area Code &amp; Phone No.)</small> A. Discount III (123)456-7890	15. SIGNATURE & TITLE OF APPLICATION OR AUTHORIZED AGENT. <b>A. Discount III</b>	16. DATE. <b>6/21/2004</b>																		
APPLICANT: PLEASE MAKE NO ENTRY BELOW THIS LINE.																				
17. LABORATORY SAMPLE NUMBER.	18. ACTION.																			
19. ALCOHOL BY VOLUME.  %																				
20. ANALYST.																				
21. DATE																				

ATF 5154.1 (8-98) (Formerly ATF F 1678 (5530.5)) PREVIOUS EDITIONS ARE OBSOLETE

# Sample #3

Lab determined this sample to be **UNFIT** for beverage purposes.

Formula approval: OMB No. 1512-0095 (09/30/98)

DEPARTMENT OF THE TREASURY BUREAU OF ALCOHOL, TOBACCO AND FIREARMS FORMULA AND PROCESS FOR NONBEVERAGE PRODUCT <small>(See instructions attached-Prepare in triplicate, except if manufactured abroad)</small>			1. FORMULA NUMBER 112																				
3. NAME OF PRODUCT. N & A Pomegranate Flavor	4. CHECK IF SAMPLE WILL BE SUBMITTED <input checked="" type="checkbox"/>	5. NUMBER OF DAYS TO COMPLETE PROCESS 1	2. KIND (e.g. Alcohol, Rum) PROOF OF SPIRITS ON WHICH DRAVBACK WILL BE CLAIMED. <b>Alcohol 190 Proof</b>																				
6. NAME OF THE MANUFACTURER & ADDRESS WHERE PRODUCTS WILL BE PRODUCED ( if multiple production sites, list other addresses on reverse).  Company Inc. 1111 Road Way City, State 11111	7. CHECK KIND OF PRODUCT: <input type="checkbox"/> MEDICINE/MEDICINAL PREPARATION <input checked="" type="checkbox"/> FLAVOR/FLAVORING EXTRACT <input type="checkbox"/> FOOD PRODUCT <input type="checkbox"/> PERFUME	8. FORMULAS SUPERSEDED.																					
	9. ELIGIBLE ABSOLUTE ALCOHOL VOLUME USED. <small>(See instructions)</small> 74.35	10. ALCOHOL CONTENT BY VOLUME OF FINISHED PRODUCT. 74.35 ± 3.0																					
11. IF MADE WITH RECOVERED SPIRITS: ELIGIBLE PLUS RECOVERED ABSOLUTE ALCOHOL BY VOLUME USED. <small>(See instructions)</small>	12. IF FINISHED PRODUCT IS TO BE USED IN ALCOHOLIC BEVERAGES: A. DOES PRODUCT CONTAIN NATURAL FLAVORING? (YES OR NO) B. DOES PRODUCT CONTAIN GREATER THAN 0.1% ARTIFICIAL FLAVORING(Excluding Vanillin, Ethyl Vanillin,Maltol, Ethyl Maltol)? <small>(Yes or No)</small> C. STATE PARTS PER MILLION IN PRODUCT OF: VANILLIN ETHYL VANILLIN <b>SYNTHETIC MALTOL</b> ETHYL MALTOL D. DOES PRODUCT CONTAIN A COLOR ADDITIVE? IF YES, WHICH? E. ARE ALL INGREDIENTS APPROVED BY FDA FOR USE WITHOUT LIMITATION OR RESTRICTION? (YES OR NO)																						
13. FORMULA AND PROCESS <small>(Use Additional Space on Reverse if Necessary)</small>																							
<table> <tr> <td>Alcohol 190 Proof</td> <td>74.87 g (91.97 mL)</td> </tr> <tr> <td>Pomegranate Juice</td> <td>23.25 g</td> </tr> <tr> <td>N Benzaldehyde</td> <td>0.28 g</td> </tr> <tr> <td>A Ethyl Butyrate</td> <td>0.23 g</td> </tr> <tr> <td>N Benzyl Alcohol</td> <td>0.23 g</td> </tr> <tr> <td>N Cinnamaldehyde</td> <td>0.09 g</td> </tr> <tr> <td>N Allyl Butyrate</td> <td>1.05 g</td> </tr> <tr> <td>Yield</td> <td>100 g</td> </tr> <tr> <td></td> <td>117.51 mL</td> </tr> <tr> <td colspan="2">SIMPLE MIXTURE</td> </tr> </table>				Alcohol 190 Proof	74.87 g (91.97 mL)	Pomegranate Juice	23.25 g	N Benzaldehyde	0.28 g	A Ethyl Butyrate	0.23 g	N Benzyl Alcohol	0.23 g	N Cinnamaldehyde	0.09 g	N Allyl Butyrate	1.05 g	Yield	100 g		117.51 mL	SIMPLE MIXTURE	
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14. CONTACT PERSON <small>(Include Area Code &amp; Phone No.)</small> A. Discount III (123)456-7890	15. SIGNATURE & TITLE OF APPLICATION OR AUTHORIZED AGENT. <i>A. Discount III</i>	16. DATE. 6/21/2004																					
APPLICANT: PLEASE MAKE NO ENTRY BELOW THIS LINE.																							
17. LABORATORY SAMPLE NUMBER.	18. ACTION.																						
19. ALCOHOL BY VOLUME. %																							
20. ANALYST.																							
21. DATE																							

ATF 5154.1 (6-98) (Formerly ATF F 1678 (6530.5)) PREVIOUS EDITIONS ARE OBSOLETE

# Sample #4

Lab determined this sample to be **FIT** for beverage purposes.

Formula approval: OMB No. 1512-0095 (09/30/98)

DEPARTMENT OF THE TREASURY BUREAU OF ALCOHOL, TOBACCO AND FIREARMS FORMULA AND PROCESS FOR NONBEVERAGE PRODUCT <small>(See instructions attached-Prepare in triplicate, except if manufactured abroad)</small>			1. FORMULA NUMBER 113
3. NAME OF PRODUCT. Nat Pomegranate WONF	4. CHECK IF SAMPLE WILL BE SUBMITTED <input checked="" type="checkbox"/>	5. NUMBER OF DAYS TO COMPLETE PROCESS 1	2. KIND (e.g. Alcohol, Rum) PROOF OF SPIRITS ON WHICH DRAWBACK WILL BE CLAIMED. <b>Alcohol 190 Proof</b>
6. NAME OF THE MANUFACTURER & ADDRESS WHERE PRODUCTS WILL BE PRODUCED ( if multiple production sites, list other addresses on reverse). Company Inc. 1111 Road Way City, State 11111	7. CHECK KIND OF PRODUCT: <input type="checkbox"/> MEDICINE/ MEDICINAL PREPARATION <input checked="" type="checkbox"/> FLAVOR/ FLAVORING EXTRACT <input type="checkbox"/> FOOD PRODUCT <input type="checkbox"/> PERFUME	8. FORMULAS SUPERSEDED.	
9. ELIGIBLE ABSOLUTE ALCOHOL VOLUME USED. <small>(See instructions)</small> 39.60	10. ALCOHOL CONTENT BY VOLUME OF FINISHED PRODUCT. 39.60 ± 1.5		
11. IF MADE WITH RECOVERED SPIRITS: ELIGIBLE PLUS RECOVERED ABSOLUTE ALCOHOL BY VOLUME USED. <small>(See instructions)</small>	12. IF FINISHED PRODUCT IS TO BE USED IN ALCOHOLIC BEVERAGES: A. DOES PRODUCT CONTAIN NATURAL FLAVORING? (YES OR NO) B. DOES PRODUCT CONTAIN GREATER THAN 0.1% ARTIFICIAL FLAVORING(Excluding Vanillin, Ethyl Vanillin,Maltol, Ethyl Maltol)? <small>(Yes or No)</small> C. STATE PARTS PER MILLION IN PRODUCT OF: VANILLIN ETHYL VANILLIN SYNTHETIC MALTOL ETHYL MALTOL D. DOES PRODUCT CONTAIN A COLOR ADDITIVE? IF YES, WHICH? E. ARE ALL INGREDIENTS APPROVED BY FDA FOR USE WITHOUT LIMITATION OR RESTRICTION? (YES OR NO)		
13. FORMULA AND PROCESS <small>(Use Additional Space on Reverse if Necessary)</small>  Alcohol 190 Proof 33.68 g (41.37 mL) Pomegranate Juice 26.12 g Citric Acid 3.13 g Sugar 5.39 g N Ethyl Butyrate 0.15 g N Cis 3-hexenyl 0.19 g Water 31.34 g  Yield 100 g 99.25 mL  SIMPLE MIXTURE			
14. CONTACT PERSON <small>(Include Area Code &amp; Phone No.)</small> A. Discount III (123)456-7890	15. SIGNATURE & TITLE OF APPLICATION OR AUTHORIZED AGENT. <i>A. Discount III</i>	16. DATE. 6/21/2004	
APPLICANT: PLEASE MAKE NO ENTRY BELOW THIS LINE.			
17. LABORATORY SAMPLE NUMBER.	18. ACTION.		
19. ALCOHOL BY VOLUME.  %			
20. ANALYST.			
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ATF 5154.1 (6-98) (Formerly ATF F 1678 (6530.5)) PREVIOUS EDITIONS ARE OBSOLETE



# In Conclusion...

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When tasting for fitness remember...

- Could the average person mistake the sample for an alcoholic beverage?
- Is it fit or unfit? Not whether you like it or not.

\*\* Even if you conduct your own taste panel and include the statement in box #13 - STILL SEND US A SAMPLE!! \*\*

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# Any Questions??

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## Form 5154.1 Resources

- Drawback Tutorial
- Calculation Worksheets
- Pay.gov

For more information go to

[www.ttb.gov/ssd](http://www.ttb.gov/ssd)



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