

# Scottish Export 80/- (9 C)

Type: All Grain  
Batch Size: 5.25 gal  
Boil Size: 6.72 gal  
Boil Time: 60 min  
End of Boil Vol: 5.72 gal  
Final Bottling Vol: 5.25 gal  
Fermentation: Ale, Two Stage  
Date: 30 Jan 2016  
Brewer: Adam  
Asst Brewer:  
Equipment: Adams Setup  
Efficiency: 72.00 %  
Est Mash Efficiency: 75.4 %  
Taste Rating: 30.0  
Taste Notes:

## Ingredients

Amt	Name	Type	#	%/IBU
7 lbs	Pale Malt, Maris Otter (3.0 SRM)	Grain	1	74.7 %
1 lbs	Caramel/Crystal Malt - 40L (40.0 SRM)	Grain	2	10.7 %
8.0 oz	Carafoam (2.0 SRM)	Grain	3	5.3 %
8.0 oz	Munich Malt (9.0 SRM)	Grain	4	5.3 %
6.0 oz	Caramel/Crystal Malt -120L (120.0 SRM)	Grain	5	4.0 %
1.00 oz	Columbus (Tomahawk) [15.10 %] - Boil 15.0 min	Hop	6	25.9 IBUs
1.0 pkg	Safale American (DCL/Fermentis #US-05) [50.28 ml]	Yeast	7	-

## Gravity, Alcohol Content and Color

Est Original Gravity: 1.048 SG  
Est Final Gravity: 1.013 SG  
Estimated Alcohol by Vol: 4.6 %  
Bitterness: 25.9 IBUs  
Est Color: 11.8 SRM

Measured Original Gravity: 1.054 SG  
Measured Final Gravity: 1.010 SG  
Actual Alcohol by Vol: 5.8 %  
Calories: 178.9 kcal/12oz

## Mash Profile

Mash Name: Single Infusion, Full Body, Batch Sparge  
Sparge Water: 5.02 gal  
Sparge Temperature: 168.0 F  
Adjust Temp for Equipment: FALSE

Total Grain Weight: 9 lbs 6.0 oz  
Grain Temperature: 72.0 F  
Tun Temperature: 72.0 F  
Mash PH: 5.20

## Mash Steps

Name	Description	Step Temperature	Step Time
Mash In	Add 2.93 gal of water at 168.2 F	156.0 F	45 min

Sparge: Batch sparge with 2 steps (1.61gal, 3.41gal) of 168.0 F water

Mash Notes: Simple single infusion mash for use with most modern well modified grains (about 95% of the time).

## Carbonation and Storage

Carbonation Type: Keg  
Pressure/Weight: 12.54 PSI  
Keg/Bottling Temperature: 45.0 F  
Fermentation: Ale, Two Stage

Volumes of CO2: 2.3  
Carbonation Used: Keg with 12.54 PSI  
Age for: 30.00 days  
Storage Temperature: 65.0 F