

## Alesmith Milford Dark Mild

This is Greg's Mild...

ProMash Brewing Session Printout  
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Brewing Date: Friday February 02, 2001  
Head Brewer: Greg Guyton  
Asst Brewer:  
Recipe: Alesmith Milford Dark Mild

ProMash Brewing Session - Recipe Details Printout  
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BJCP Style and Style Guidelines  
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10-A Brown Ale, Mild

Min OG: 1.030 Max OG: 1.038  
Min IBU: 10 Max IBU: 20  
Min Clr: 10 Max Clr: 25 Color in SRM, Lovibond

Recipe Specifics  
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Batch Size (GAL): 10.00 Wort Size (GAL): 10.00  
Total Grain (LBS): 14.00  
Anticipated OG: 1.036 Plato: 8.92  
Anticipated SRM: 27.4  
Anticipated IBU: 14.5  
Brewhouse Efficiency: 65  
Wort Boil Time: 60 Minutes

Actual OG: 1.035 Plato: 8.78  
Actual FG: 1.009 Plato: 2.31

Alc by Weight: 2.67 by Volume: 3.41 From Measured Gravities.  
ADF: 73.7 RDF 61.1 Apparent & Real Degree of  
Fermentation.

Actual Mash System Efficiency: 64  
Anticipated Points From Mash: 31.07  
Actual Points From Mash: 30.50

Pre-Boil Amounts  
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Evaporation Rate: 9.00 Percent Per Hour

Raw Pre-Boil Amounts - only targeted volume/gravity and evaporation rate taken into account:

Pre-Boil Wort Size: 10.99 Gal  
Pre-Boil Gravity: 1.032 SG 8.14 Plato

With sparge water, mash water, additional infusions, vessel losses, top-up water and evaporation rate recorded in the Water Needed Calculator:

Water Needed Pre-Boil Wort Size: 12.44 Gal  
Water Needed Pre-Boil Gravity: 1.029 SG 7.21 Plato

#### Formulas Used

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Brewhouse Efficiency and Predicted Gravity based on Method #1, Potential Used.

Final Gravity Calculation Based on Points.

Hard Value of Sucrose applied. Value for recipe: 46.2100 ppppg

% Yield Type used in Gravity Prediction: Fine Grind Dry Basis.

Color Formula Used: Morey

Hop IBU Formula Used: Rager

Additional Utilization Used For Plug Hops: 2

Additional Utilization Used For Pellet Hops: 10

#### Grain/Extract/Sugar

%	Amount	Name	Origin	Potential	SRM
71.4	10.00 lbs.	Pale Malt(2-row)	Great Britain	1.038	3
14.3	2.00 lbs.	Crystal 150L	Great Britain	1.033	120
3.6	0.50 lbs.	Chocolate Malt	Great Britain	1.034	475
1.8	0.25 lbs.	Roasted Barley	Belgium	1.030	575
1.8	0.25 lbs.	Special B Malt	Belgian	1.030	120
7.1	1.00 lbs.	Brown Sugar	America	1.045	15

Potential represented as SG per pound per gallon.

#### Hops

Amount	Name	Form	Alpha	IBU	Boil Time
0.50 oz.	Wye Challenger	Plug	8.20	9.4	60 min.
1.00 oz.	Goldings - E.K.	Whole	4.50	5.1	30 min.

#### Yeast

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WYeast 1968 London Extra Special Bitter

#### Mash Schedule

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Mash Type: Single Step  
Heat Type: Direct

Qts Water Per LBS Grain: 1.00 Total Qts: 13.00

Grain Temp: 80 F

Dough In Temp: 166 Time: 0  
Saccharification Rest Temp: 152 Time: 90  
Mash-out Rest Temp: 0 Time: 0  
Sparge Temp: 175 Time: 60

Runnings Stopped At: 1.010 SG 2.56 Plato

#### Water Needed For Brewing Session

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Sparge Amount: 6.00 Sparge Deadspace: 0.00 Total Into Mash: 6.00

Total Grain LBS: 13.00 Qts Per LBS: 1.00 Total From Mash: 1.69  
Mash Gallons: 3.25  
Grain Absorption: 1.56

Amount Lost in Lauter Tun Deadspace,  
Grant and Misc. to Kettle: 0.25

Top Up Water Added to Kettle: 5.00  
Amount into Kettle: 12.44

Boil Time (min): 60.00 Evaporation Rate: 9.00  
Amount after Boil: 11.32

Left in Kettle Deadspace: 0.75  
Left in Hopback: 0.00  
Left in Counterflow Chiller: 0.00  
Left in Other Equipment / Other Absorption: 0.25

Amount to Chillers: 10.32  
Amount After Cooling (4 perc.): 9.91

Grain absorption rate is: 0.12 (Gallons Per LBS)

Evaporation rate is Percent per Hour

This formulation will yield 9.91 gallons of fermentable wort.

You will need 14.25 gallons of water for the complete brewing session.

#### Efficiency Specifics

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Recipe Efficiency Setting: 65

With sparge water, mash water, additional infusions, vessel losses, top-up water and evaporation rate recorded in the Water Needed Calculator:

Target Volume (GAL): 12.44

Estimated OG: 1.029 Plato: 7.21

Raw Pre-Boil Targets - only targeted volume/gravity and evaporation rate taken into account:

Target Volume (GAL): 10.99

Estimated OG: 1.032 Plato: 8.14

Post-Boil Targets:

Target Volume (GAL): 10.00

Estimated OG: 1.036 Plato: 8.92

Recorded Actuals - Measurement Taken In Kettle:

Recorded Volume (GAL): 10.00

Recorded OG: 1.035 Plato: 8.78

At 100 percent extraction from the maximum mash potential:

Total Points: 52.30

Points From Mash: 47.80

Points From Extract/Sugar: 4.50

With the recipe efficiency setting, you should have achieved:

Total Points: 35.57

Points From Mash: 31.07

Points From Extract/Sugar: 4.50

Actuals achieved were:

Actual Points From Mash: 30.50

Actual Mash System Efficiency: 64

## Fermentation Specifics

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Pitched From: Starter  
Amount Pitched: 800 mL  
Lag Time: 9.00 hours

Primary Fermenter: Glass  
Primary Type: Closed  
Days In Primary: 7  
Primary Temperature: 65 degrees F

Secondary Fermenter: Glass  
Secondary Type: Closed  
Days In Secondary: 14  
Secondary Temperature: 65 degrees F

Original Gravity: 1.035 SG 8.78 Plato  
Finishing Gravity: 1.009 SG 2.31 Plato

## Mash Notes

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All brewing liquor treated with 88% Lactic acid to a pH of 6.0

5 Gallons of water added to kettle and pre boiled.

7 Gallons of heavy runnings added to obtain a gravity of ~ 1.030.  
Grain bill was adjusted up to compensate for lower sparge volume.

Brown sugar added in order to achieve target gravity of 1.035

