

Multigrain American Stout

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **54**
- SRM **39.9**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **0 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **19.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Żytni	1 kg (15.4%)	85 %	8
Grain	Pilznieński	1.5 kg (23.1%)	81 %	4
Grain	Słód Wędzony Steinbach	1 kg (15.4%)	80 %	5
Grain	Oats, Flaked	0.8 kg (12.3%)	80 %	2
Grain	Barley, Flaked	0.8 kg (12.3%)	70 %	4
Grain	Fawcett - Pale Chocolate	0.5 kg (7.7%)	71 %	600
Grain	Weyermann - Chocolate Wheat	0.5 kg (7.7%)	74 %	1000
Grain	Special B Castle	0.4 kg (6.2%)	70 %	350

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	15 g	60 min	15.5 %
Whirlpool	Denali	50 g	20 min	13 %
Whirlpool	Sorachi Ace	50 g	20 min	10 %
Dry Hop	Sorachi Ace	50 g	3 day(s)	10 %

Dry Hop	Denali	50 g	3 day(s)	13 %
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Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis