

## #4 Milk Stout z bananami

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **19**
- SRM **20.9**
- Style **Sweet Stout**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **29.5 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11 liter(s)**
- Total mash volume **14.7 liter(s)**

### Steps

- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **43 min**
- Temp **78 C**, Time **15 min**

### Mash step by step

- Heat up **11 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **43 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **22.2 liter(s)** of **76C** water or to achieve **29.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.25 kg (29.4%)	80 %	5
Grain	Castlemalting - Cara Clair	0.44 kg (5.7%)	78 %	4
Grain	Strzegom Czekoladowy 400	0.25 kg (3.3%)	68 %	400
Grain	Pszeniczny	0.25 kg (3.3%)	85 %	4
Grain	Strzegom Czekoladowy jasny	0.2 kg (2.6%)	68 %	400
Grain	Acid Malt	0.075 kg (1%)	58.7 %	6
Grain	Jęczmień palony	0.2 kg (2.6%)	55 %	985
Adjunct	Banan	4 kg (52.2%)	35 %	0

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	7.1 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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Safale S-04	Ale	Dry	11.5 g	Safale
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### Extras

Type	Name	Amount	Use for	Time
Flavor	Banan	4000 g	Secondary	12 day(s)
Other	Laktoza	680 g	Boil	15 min