

## 13/02/2018 - Milk Stout - 21.12.2018

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- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **27**
- SRM **26.9**
- Style **Sweet Stout**

### Batch size

- Expected quantity of finished beer **1250 liter(s)**
- Trub loss **0 %**
- Size with trub loss **1250 liter(s)**
- Boil time **60 min**
- Evaporation rate **2 %/h**
- Boil size **1402.5 liter(s)**

### Mash information

- Mash efficiency **85.6 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **875 liter(s)**
- Total mash volume **1125 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **0 min**

### Mash step by step

- Heat up **875 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **76C**
- Sparge using **777.5 liter(s)** of **76C** water or to achieve **1402.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	175 kg (70%)	80 %	6
Grain	Monachijski Jasny	50 kg (20%)	80 %	16
Grain	Czekoladowy	12.5 kg (5%)	75 %	1050
Grain	Jęczmień palony	12.5 kg (5%)	75 %	1150

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	USA Jaryllo	800 g	90 min	13.2 %
Whirlpool	PL lunga	2500 g	5 min	11.7 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	5000 ml	---