

## #18 Milk stout czarka z Dodatkami

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **35**
- SRM **52**
- Style **Sweet Stout**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **22.1 liter(s)**
- Total mash volume **29 liter(s)**

### Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **22.1 liter(s)** of strike water to **72C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **12.6 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	2 kg (26.3%)	79 %	10
Grain	Strzegom Pale Ale	2 kg (26.3%)	79 %	6
Grain	Strzegom Czekoladowy 1200	0.2 kg (2.6%)	8 %	1202
Grain	Oats, Flaked	0.8 kg (10.5%)	80 %	2
Grain	Jęczmień palony	1 kg (13.2%)	5 %	985
Grain	Weyermann - Chocolate Wheat	0.2 kg (2.6%)	4 %	788
Sugar	Milk Sugar (Lactose)	0.7 kg (9.2%)	76.1 %	0
Grain	Żytni	0.7 kg (9.2%)	85 %	8

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	40 g	60 min	10 %

### Yeasts

Name	Type	Form	Amount	Laboratory
s 04	Ale	Dry	11.5 g	---