

Milk Stout z łuską kakaowca

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **31**
- SRM **48.4**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **19.8 liter(s)**

Steps

- Temp **55 C**, Time **5 min**
- Temp **65 C**, Time **50 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **15.8 liter(s)** of strike water to **59.4C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **50 min** at **65C**
- Keep mash **10 min** at **76C**
- Sparge using **7.3 liter(s)** of **76C** water or to achieve **19.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	1.2 kg (25.3%)	85 %	7
Grain	Strzegom Monachijski typ II	1 kg (21.1%)	79 %	22
Adjunct	płatki jęczmienne	0.4 kg (8.4%)	--- %	---
Adjunct	płatki żytnie	0.4 kg (8.4%)	--- %	---
Grain	Caraaroma	0.25 kg (5.3%)	74 %	400
Grain	Weyermann - Carafa I	0.3 kg (6.3%)	70 %	900
Grain	Weyermann pszeniczny czekoladowy	0.2 kg (4.2%)	65 %	1100
Grain	Abbey Malt Weyermann	0.5 kg (10.5%)	75 %	45
Grain	Castle Cafe Castle malting	0.5 kg (10.5%)	75.5 %	480

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	8.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	300 ml	---

Extras

Type	Name	Amount	Use for	Time
Flavor	laktoza	300 g	Boil	10 min
Flavor	łuska kakaowca	800 g	Secondary	5 day(s)