

Czekoladowy Stout

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **29**
- SRM **30.1**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **22.6 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **17 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **14 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Best Pilsen	4.1 kg (63.3%)	80.5 %	4
Grain	Strzegom Karmel 50	0.22 kg (3.4%)	75 %	50
Grain	Weyermann Caramunich 3	0.23 kg (3.5%)	76 %	150
Grain	Strzegom Czekoladowy ciemny	0.23 kg (3.5%)	68 %	1200
Grain	Bestmalz - Special X	0.28 kg (4.3%)	75 %	400
Grain	Black (Patent) Malt	0.13 kg (2%)	55 %	985
Grain	Płatki pszeniczne	0.47 kg (7.3%)	60 %	3
Sugar	Milk Sugar (Lactose)	0.7 kg (10.8%)	76.1 %	0
Adjunct	Rice Hulls	0.12 kg (1.9%)	1 %	0

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Horondial	Ale	Slant	160 ml	Omega

Extras

Type	Name	Amount	Use for	Time
Spice	Laska wanilii	20 g	Secondary	10 day(s)
Spice	Łuska kakaowca	200 g	Secondary	10 day(s)