

Stout

- Gravity **10 BLG**
- ABV **4 %**
- IBU **27**
- SRM **27.5**
- Style **American 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 **12.3 liter(s)**
- Total mash volume **16.4 liter(s)**

Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **80 C**, Time **5 min**

Mash step by step

- Heat up **12.3 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **80C**
- Sparge using **17.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.73 kg (66.7%)	81 %	4
Grain	Strzegom Monachijski typ I	0.91 kg (22.2%)	79 %	16
Grain	Jęczmień palony	0.27 kg (6.7%)	55 %	985
Grain	Strzegom Czekoladowy ciemny	0.18 kg (4.4%)	68 %	1200

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	22.73 g	60 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
S05	Ale	Slant	181.82 ml	---

Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	4.55 g	Boil	15 min