

Dry Stout

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **24**
- SRM **40.3**
- 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 **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **60 min**
- Temp **78 C**, Time **10 min**
- Temp **100 C**, Time **60 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **60 min** at **72C**
- Keep mash **10 min** at **78C**
- Keep mash **60 min** at **100C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4 kg (80%)	80 %	4
Grain	Strzegom Karmel 600	0.2 kg (4%)	68 %	601
Grain	Jęczmień palony	0.4 kg (8%)	55 %	985
Grain	Viking Czekoladowy ciemny	0.4 kg (8%)	67 %	900

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	25 g	30 min	11 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Fermentis