

#1 Dry Stout

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **36**
- SRM **28.6**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **9 liter(s)**
- Trub loss **5 %**
- Size with trub loss **9.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **11.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.8 liter(s)**
- Total mash volume **9 liter(s)**

Steps

- Temp **67 C**, Time **40 min**
- Temp **71 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **6.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **40 min** at **67C**
- Keep mash **40 min** at **71C**
- Keep mash **10 min** at **78C**
- Sparge using **6.8 liter(s)** of **76C** water or to achieve **11.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pilsner® 2,5-4,5 EBC Weyermann	1.5 kg (66.7%)	80 %	4
Grain	Monachijski	0.5 kg (22.2%)	80 %	16
Grain	Jęczmień palony	0.15 kg (6.7%)	55 %	985
Grain	Czekoladowy	0.1 kg (4.4%)	60 %	788

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	15 g	50 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	5 g	Safale