

# DRY STOUT

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **33**
- SRM **36.3**
- Style **Dry 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 **24.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **17.4 liter(s)**
- Total mash volume **21.8 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **15 min**

## Mash step by step

- Heat up **17.4 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **15 min** at **76C**
- Sparge using **11.2 liter(s)** of **76C** water or to achieve **24.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Golden Promise	3 kg (69%)	81 %	4
Grain	Barley, Flaked	0.7 kg (16.1%)	70 %	4
Grain	Strzegom Czekoladowy ciemny	0.35 kg (8%)	68 %	1200
Grain	Jęczmień palony	0.3 kg (6.9%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	10 %
Aroma (end of boil)	Fuggles	30 g	15 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	10 g	---

## Extras

Type	Name	Amount	Use for	Time
Water Agent	CaCO3	8 g	Boil	60 min