

# 1. Dry Stout

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **70**
- SRM **32.5**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **13 %/h**
- Boil size **19 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **20.3 liter(s)**

## Steps

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

## Mash step by step

- Heat up **15.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **7.7 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.5 kg (77.8%)	80 %	5
Grain	Płatki jęczmienne	0.5 kg (11.1%)	80 %	4
Grain	Jęczmień palony	0.3 kg (6.7%)	55 %	985
Grain	Czekoladowy	0.2 kg (4.4%)	60 %	788

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Target	35 g	60 min	9 %
Boil	Simcoe	10 g	60 min	11.5 %
Aroma (end of boil)	Simcoe	10 g	15 min	11.5 %
Dry Hop	Simcoe	40 g	7 day(s)	11.5 %

## Yeasts

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