

# Dry Stout #1

---

- Gravity **11.9 BLG**
- ABV **5.1 %**
- IBU **37**
- SRM **40**

## Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **0 %**
- Size with trub loss **14 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.58 liter(s)**

## Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.3 liter(s)**
- Total mash volume **12.4 liter(s)**

## Steps

- Temp **64 C**, Time **90 min**
- Temp **75 C**, Time **10 min**

## Mash step by step

- Heat up **9.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **90 min** at **64C**
- Keep mash **10 min** at **75C**
- Sparge using **13.4 liter(s)** of **76C** water or to achieve **19.58 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale Malt	2 kg	80 %	15
Grain	Viking Munich Malt Light	0.7 kg	78 %	41
Grain	Viking Roasted Barley	0.25 kg	70 %	2934
Grain	Chocolate Wheat (Weyermann)	0.15 kg	75.74 %	2180

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Horizon	20 g	30 min	12 %
Boil	Horizon	10 g	10 min	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Irlandzkie Ciemności	Ale	Liquid	ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Water Agent	Chlorek Wapnia	8.59 g	Mash	60 min

Water Agent	Sól	4.04 g	Mash	60 min
Water Agent	Siarczan Magnezu (MgSO4)	2.17 g	Mash	60 min
Fining	Whirlfloc Tablet	400 g	Boil	15 min