

#45 Stout do risa

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **34**
- SRM **3.7**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **0 %**
- Size with trub loss **18 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **67 C**, Time **40 min**

Mash step by step

- Heat up **14 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **40 min** at **67C**
- Sparge using **9.8 liter(s)** of **76C** water or to achieve **19.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (100%)	81 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	30 g	30 min	10.5 %