

single hop Dr Rudi

- Gravity **12.4 BLG**
- ABV ---
- IBU **38**
- SRM **4.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **27.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.3 liter(s)**
- Total mash volume **19 liter(s)**

Steps

- Temp **62 C**, Time **10 min**
- Temp **68 C**, Time **55 min**
- Temp **75 C**, Time **5 min**

Mash step by step

- Heat up **14.3 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **10 min** at **62C**
- Keep mash **55 min** at **68C**
- Keep mash **5 min** at **75C**
- Sparge using **18.1 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.5 kg (94.7%)	80 %	5
Grain	Weyermann - Carapils	0.25 kg (5.3%)	78 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Dr Rudi	20 g	60 min	12.8 %
Boil	Dr Rudi	15 g	10 min	12.8 %
Boil	Dr Rudi	20 g	0 min	12.8 %
Dry Hop	Dr Rudi	25 g	3 day(s)	12.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis