

Ragnar Rage

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **22**
- SRM **12**
- Style **Scottish Heavy 70/-**

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 **15 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **22.5 liter(s)**

Steps

- Temp **68 C**, Time **90 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **12.9 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (44.4%)	80 %	5
Grain	Pilznieński	1 kg (22.2%)	81 %	4
Grain	Karmelowy Jasny 30EBC	0.5 kg (11.1%)	75 %	30
Grain	Słód jęczmienny wędzony torfem Viking Malt	0.3 kg (6.7%)	85 %	4
Grain	Weyermann - Carafa III	0.1 kg (2.2%)	70 %	1024
Grain	Płatki owsiane	0.3 kg (6.7%)	85 %	3
Grain	Słód Cookie Viking Malt	0.3 kg (6.7%)	79 %	45

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Piekarskie - stout	Ale	Slant	200 ml	---