

## Pas4

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- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **24**
- SRM **4.3**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **28.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **74 C**, Time **10 min**
- Temp **77 C**, Time **1 min**

### Mash step by step

- Heat up **18 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **74C**
- Keep mash **1 min** at **77C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **28.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.3 kg (55%)	81 %	5
Grain	Viking Wheat Malt	2.7 kg (45%)	82 %	5

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Galaxy	5 g	60 min	15.5 %
Aroma (end of boil)	Galaxy	15 g	30 min	15.5 %
Dry Hop	Galaxy	30 g	2 day(s)	15.5 %