

## ddh

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- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **61**
- SRM **8.2**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 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 **65 C**, Time **45 min**
- Temp **72 C**, Time **15 min**

### Mash step by step

- Heat up **18 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **45 min** at **65C**
- Keep mash **15 min** at **72C**
- Sparge using **19.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (83.3%)	80 %	5
Grain	Viking melanoidynowy	0.5 kg (8.3%)	75 %	60
Grain	Strzegom Karmel 150	0.3 kg (5%)	75 %	150
Grain	Płatki owsiane	0.2 kg (3.3%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum szyszka	50 g	60 min	13.5 %
Dry Hop	Citra	30 g	7 day(s)	12 %
Dry Hop	East Kent Goldings	30 g	---	5.1 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	50 g	Fermentis