

# hops hops hops

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- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **75**
- SRM **5.1**

## 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 **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **15.6 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	5 kg (83.3%)	80 %	5
Grain	Monachijski	0.7 kg (11.7%)	80 %	16
Grain	Weyermann - Carapils	0.3 kg (5%)	78 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	35 g	60 min	9.5 %
Boil	Amarillo	35 g	30 min	9.5 %
Boil	Amarillo	35 g	15 min	9.5 %
Boil	Amarillo	10 g	1 min	9.5 %
Boil	Cascade	20 g	1 min	6 %
Dry Hop	Cascade	50 g	7 day(s)	6 %

## Yeasts

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