

# Monachijski heeles

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **25**
- SRM **4.6**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **77 C**, Time **10 min**

## Mash step by step

- Heat up **15.6 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **77C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	1.4 kg (31.5%)	82 %	4
Grain	Pilzneński	2 kg (44.9%)	81 %	4
Grain	Monachijski	0.6 kg (13.5%)	80 %	16
Grain	Carahell	0.45 kg (10.1%)	77 %	26

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tradition	30 g	60 min	5.5 %
Aroma (end of boil)	Saaz (Czech Republic)	30 g	15 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Dry	11.5 g	Fermentis