

# monachijskie

---

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **35**
- SRM **10.3**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **10 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **32.2 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **20.2 liter(s)** of **76C** water or to achieve **32.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ II	3 kg (50%)	79 %	22
Grain	Strzegom Pilzneński	1 kg (16.7%)	80 %	4
Grain	caramel dark	0.5 kg (8.3%)	75 %	90
Grain	Bestmalz Carmel Pils	0.6 kg (10%)	75 %	5
Grain	Strzegom Monachijski typ I	0.9 kg (15%)	79 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga goryczkowy	20 g	60 min	11 %
Boil	Mandarina Bavaria	20 g	30 min	10 %
Boil	Mandarina Bavaria	20 g	5 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
m74	Lager	Slant	100 ml	---