

# Groszkowe #10 (Vermelho) - Browar na Wyżynie

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **37**
- SRM **4.5**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **4 %**
- Size with trub loss **23.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **26.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **26.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	pilzneński Soufflet	1 kg (20%)	80 %	4
Grain	pilzneński 2RS Castle Malting	3 kg (60%)	81 %	4
Grain	monachijski typ II Viking Malt	0.5 kg (10%)	78 %	22
Grain	pszeniczny Castle Malting	0.5 kg (10%)	83 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Vermelho (Polishhops)	20 g	100 min	9.5 %
Boil	Vermelho (Polishhops)	20 g	20 min	9.5 %
Whirlpool	Vermelho (Polishhops)	60 g	0 min	9.5 %
Dry Hop	Vermelho (Polishhops)	100 g	3 day(s)	9.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Slant	200 ml	Fermentum Mobile

### Extras

Type	Name	Amount	Use for	Time
Water Agent	siarczan wapnia	5 g	Mash	60 min
Water Agent	chlerek wapnia	5 g	Mash	60 min
Water Agent	kwas fosforowy 75% zacier	4 g	Mash	60 min
Water Agent	kwas fosforowy 75% wysładzanie	2 g	Mash	60 min
Fining	Mech irlandzki	2 g	Boil	15 min
Other	siarczan cynku	2 g	Boil	0 min