

# Owczarek belgijski

- Gravity **20.2 BLG**
- ABV ---
- IBU **120**
- SRM **13.9**
- Style **Belgian IPA**

## Batch size

- Expected quantity of finished beer **17.5 liter(s)**
- Trub loss **10 %**
- Size with trub loss **19.3 liter(s)**
- Boil time **75 min**
- Evaporation rate **7 %/h**
- Boil size **21 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **24.5 liter(s)**
- Total mash volume **31.5 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **45 min**
- Temp **69 C**, Time **45 min**
- Temp **77 C**, Time **15 min**

## Mash step by step

- Heat up **24.5 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **45 min** at **62C**
- Keep mash **45 min** at **69C**
- Keep mash **15 min** at **77C**
- Sparge using **3.5 liter(s)** of **76C** water or to achieve **21 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (71.4%)	80 %	7.5
Grain	Castlemalting Abbey	1 kg (14.3%)	78 %	45
Grain	Monachijski	1 kg (14.3%)	80 %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	30 g	75 min	11 %
Boil	lunga	35 g	20 min	11 %
Boil	Topaz	40 g	20 min	15 %
Boil	Ella (AUS)	30 g	20 min	14.6 %
Boil	Topaz	10 g	5 min	15 %
Boil	Ella (AUS)	30 g	5 min	14.6 %
Boil	Amarillo	100 g	5 min	9.5 %
Boil	lunga	35 g	5 min	11 %
Dry Hop	Ella (AUS)	40 g	7 day(s)	14.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M41 Belgian Ale	Ale	Dry	10 g	Mangrove Jack's

## Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	5 g	Boil	5 min