

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 |