

moje

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **39**
- SRM **12.9**

Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **17.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **20.3 liter(s)**

Steps

- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **15.8 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **6.4 liter(s)** of **76C** water or to achieve **17.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Pale Ale Weyermann | 3.2 kg (71.1%) | --- % | 7.5 |
| Grain | monachijski typ I Weyermann | 0.5 kg (11.1%) | --- % | 17 |
| Grain | viking malt karmelowy | 0.8 kg (17.8%) | --- % | 100 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|----------|------------|
| Boil | Marynka | 10 g | 60 min | 10 % |
| Boil | Marynka | 10 g | 30 min | 10 % |
| Boil | Marynka | 30 g | 10 min | 10 % |
| Dry Hop | Lublin (Lubelski) | 20 g | 4 day(s) | 4 % |
| Dry Hop | Lublin (Lubelski) | 30 g | 2 day(s) | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us 05 | Ale | Dry | 11.5 g | --- |