

Trzeźwość

- Gravity **20 BLG**
- ABV ---
- IBU **14**
- SRM **28.8**
- Style **Specialty Beer**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.7 liter(s)**
- Total mash volume **28.9 liter(s)**

Steps

- Temp **69 C**, Time **60 min**

Mash step by step

- Heat up **21.7 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **60 min** at **69C**
- Sparge using **11.9 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Maris Otter Crisp | 6 kg (83%) | 83 % | 4 |
| Grain | Weyermann - Melanoiden Malt | 0.4 kg (5.5%) | 81 % | 70 |
| Grain | Carafa III | 0.13 kg (1.8%) | 70 % | 1300 |
| Grain | Weyermann - Acidulated Malt | 0.5 kg (6.9%) | 80 % | 4.5 |
| Grain | Simpsons - Crystal Dark | 0.2 kg (2.8%) | 74 % | 430 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 20 g | 15 min | 10 % |
| Boil | Hallertau Spalt Select | 25 g | 30 min | 3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------------|------|---------|--------|------------|
| Safale US-05 | Ale | Culture | 1000 g | Maciej Lab |
| wyeast - roeselare mix | Ale | Liquid | 125 ml | wyeast |