

harcerskie

- Gravity **4.3 BLG**
- ABV **1.6 %**
- IBU **13**
- SRM **4.3**
- Style **English IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **64 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6 liter(s)**
- Total mash volume **8 liter(s)**

Steps

- Temp **72 C**, Time **60 min**
- Temp **77 C**, Time **5 min**

Mash step by step

- Heat up **6 liter(s)** of strike water to **80.7C**
- Add grains
- Keep mash **60 min** at **72C**
- Keep mash **5 min** at **77C**
- Sparge using **21.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|------------|-------|-----|
| Grain | Weyermann - Pilsner Malt | 1 kg (50%) | 81 % | 5 |
| Grain | Carahell | 1 kg (50%) | 77 % | 26 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|---------|--------|----------|------------|
| Boil | Cascade | 10 g | 60 min | 6 % |
| Boil | Cascade | 10 g | 15 min | 6 % |
| Whirlpool | Cascade | 10 g | 0 min | 6 % |
| Dry Hop | Cascade | 30 g | 3 day(s) | 6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale | Slant | 70 ml | Fermentis |