

Ale angielskie

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **28**
- SRM **4.7**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **22.4 liter(s)**

Steps

- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **16.8 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **14.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---|----------------|-------|-----|
| Grain | Słód Pilsner® 2,5-4,5 EBC Weyermann | 2 kg (35.7%) | 80 % | 4 |
| Grain | Weyermann - Wiedeński | 1 kg (17.9%) | 79 % | 8 |
| Grain | Weyermann - Pale Ale Malt | 2 kg (35.7%) | 85 % | 7 |
| Grain | Oats, Flaked płatki owsiane | 0.6 kg (10.7%) | 80 % | 2 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------------------|--------|--------|------------|
| Boil | Fuggle | 30 g | 60 min | 5 % |
| Boil | East Kent Goldings | 30 g | 10 min | 4.7 % |
| Boil | East Kent Goldings | 30 g | 0 min | 4.7 % |
| Boil | Marynka | 10 g | 60 min | 6.7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|-------------|-----|-----|--------|-----------|
| Safale S-04 | Ale | Dry | 11.5 g | Fermentis |
|-------------|-----|-----|--------|-----------|

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------|--------|---------|--------|
| Fining | tabletki | 2.5 g | Boil | 15 min |