

Polski Pale Ale - kontrakt 1

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **37**
- SRM **5.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **60 liter(s)**
- Trub loss **5 %**
- Size with trub loss **63 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **75.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **48 liter(s)**
- Total mash volume **64 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **48 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **78C**
- Sparge using **43.9 liter(s)** of **76C** water or to achieve **75.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 12 kg (75%) | 80 % | 5 |
| Grain | cookie | 1.2 kg (7.5%) | 80 % | 40 |
| Grain | Płatki owsiane | 1.2 kg (7.5%) | 60 % | 3 |
| Grain | Płatki pszeniczne | 0.8 kg (5%) | 60 % | 3 |
| Grain | Viking Wheat Malt | 0.8 kg (5%) | 83 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|---------|--------|----------|------------|
| Boil | lunga | 75 g | 60 min | 11 % |
| Boil | Zula | 60 g | 5 min | 8.3 % |
| Boil | Oktawia | 60 g | 5 min | 7.1 % |
| Whirlpool | Zula | 120 g | 0 min | 8.3 % |
| Whirlpool | Oktawia | 120 g | 0 min | 7.1 % |
| Dry Hop | Zula | 180 g | 7 day(s) | 8.3 % |
| Dry Hop | Oktawia | 180 g | 7 day(s) | 7.1 % |

Yeasts

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

| | | | | |
|--------|-----|-----|------|-----|
| s - 33 | Ale | Dry | 50 g | --- |
|--------|-----|-----|------|-----|