

Palony olej

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **49**
- SRM **41.2**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.8 liter(s) / kg**
- Mash size **10.6 liter(s)**
- Total mash volume **14.4 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|------------------------|----------------|-------|------|
| Grain | Żytni | 1.5 kg (34.1%) | 85 % | 8 |
| Grain | Briess - Pale Ale Malt | 1.5 kg (34.1%) | 80 % | 7 |
| Adjunct | Żytni | 0.5 kg (11.4%) | 5 % | 1300 |
| Grain | Pszeniczny | 0.3 kg (6.8%) | 85 % | 4 |
| Grain | Karmelowy Jasny 30EBC | 0.2 kg (4.5%) | 75 % | 30 |
| Sugar | glokoza | 0.1 kg (2.3%) | 100 % | --- |
| Grain | Melanoiden Malt | 0.3 kg (6.8%) | 80 % | 39 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|----------|--------|----------|------------|
| Boil | lunga | 30 g | 60 min | 11 % |
| Boil | Sybilla | 30 g | 5 min | 3.5 % |
| Whirlpool | lunga | 15 g | 0 min | 11 % |
| Dry Hop | Amarillo | 15 g | 5 day(s) | 9.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|-------|--------|------------|
| us-05 | Ale | Dry | 5 g | --- |
| us 05 | Ale | Slant | 50 ml | --- |

Notes

- 16:30 - START - 62*
 - 16:45 - 64*
 - 17:00 - 68*
 - 17:15 - 70*
 - 17:40 - STOP
- Nov 12, 2017, 5:08 PM