

IPA-Warka testowa (nowy kociotek)

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **41**
- SRM **4.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **34.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **41.3 liter(s)**

Mash information

- Mash efficiency **76 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **30.3 liter(s)**
- Total mash volume **40.4 liter(s)**

Steps

- Temp **68 C**, Time **70 min**

Mash step by step

- Heat up **30.3 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **68C**
- Sparge using **21.1 liter(s)** of **76C** water or to achieve **41.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|--------------|-------|-----|
| Grain | Pilzneński | 5 kg (49.5%) | 81 % | 4 |
| Grain | Viking Pale Ale malt | 2 kg (19.8%) | 80 % | 5 |
| Grain | Briess - Carapils Malt | 0.3 kg (3%) | 74 % | 3 |
| Grain | carabody | 0.5 kg (5%) | 74 % | 3 |
| Grain | Słód owsiany Fawcett | 2 kg (19.8%) | 61 % | 5 |
| Grain | Pszeniczny | 0.3 kg (3%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------|--------|--------|------------|
| Boil | lunga | 30 g | 60 min | 11 % |
| Boil | Zula | 10 g | 50 min | 13.3 % |
| Aroma (end of boil) | Zula | 30 g | 10 min | 13.3 % |
| Aroma (end of boil) | Galaxy | 20 g | 5 min | 17.4 % |
| Whirlpool | Galaxy | 30 g | 0 min | 17.4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------|------|-------|--------|------------------|
| FM13 Irlandzkie Ciemności | Ale | Slant | 300 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|--------|
| Flavor | laktoza | 1000 g | Boil | 15 min |
| Fining | mech irlandzki | 5 g | Boil | 12 min |