

Session IPA #1 - Browar na Wyżynie

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **41**
- SRM **4.1**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **6 %**
- Size with trub loss **20.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **13.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **22.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | pale base Viking Malt | 4 kg (88.9%) | 81 % | 5 |
| Grain | płatki owsiane błyskawiczne | 0.5 kg (11.1%) | 50 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------------------------|--------|--------|------------|
| Boil | Junga (PL) - granulát | 15 g | 45 min | 12.5 % |
| Boil | Amarillo (USA) - granulát | 10 g | 20 min | 7.5 % |
| Boil | Cascade (USA) - granulát | 10 g | 20 min | 7.1 % |
| Boil | Palisade (USA) - granulát | 10 g | 20 min | 8.7 % |
| Aroma (end of boil) | Amarillo (USA) - granulát | 20 g | 1 min | 7.5 % |
| Aroma (end of boil) | Cascade (USA) - granulát | 20 g | 1 min | 7.1 % |
| Whirlpool | Amarillo (USA) - granulát | 35 g | 0 min | 7.5 % |

| | | | | |
|-----------|---------------------------|------|----------|-------|
| Whirlpool | Cascade (USA) - granulát | 35 g | 0 min | 7.1 % |
| Whirlpool | Palisade (USA) - granulát | 30 g | 0 min | 8.7 % |
| Dry Hop | Amarillo (USA) - granulát | 35 g | 3 day(s) | 7.5 % |
| Dry Hop | Cascade (USA) - granulát | 35 g | 3 day(s) | 7.1 % |
| Dry Hop | Palisade (USA) - granulát | 30 g | 3 day(s) | 8.7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------------|------|-------|--------|------------|
| FM54 Gorączka kalifornijska | Ale | Slant | 500 ml | --- |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-----------------------|---------|---------|--------|
| Fining | mech irlandzki | 4 g | Boil | 15 min |
| Water Agent | siarczan wapnia | 5 g | Mash | 70 min |
| Water Agent | chlorek sodu | 2 g | Mash | 70 min |
| Water Agent | kwask mlekowy | 4 g | Mash | 70 min |
| Water Agent | woda demineralizowana | 15000 g | Mash | 70 min |

Notes

- Whirlpool start w temp 80C 30 min
Jan 10, 2018, 11:59 AM
- Profil wody:
Ca+2 Mg+2 Na+ Cl- SO4-2 Alkalinity Residual
112.1 6.0 32.6 54.4 120.8 106.8 23.4

SO42-/Cl- ratio: 2.2 More Bitter
Jan 10, 2018, 12:08 PM