

#12 Nowofalowy Pils

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **35**
- SRM **3.8**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **2 %**
- Size with trub loss **22.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **28.2 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **20.3 liter(s)**
- Total mash volume **26.1 liter(s)**

Steps

- Temp **64 C**, Time **60 min**

Mash step by step

- Heat up **20.3 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Sparge using **13.7 liter(s)** of **76C** water or to achieve **28.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------|----------------|-------|-----|
| Grain | Pilzneński | 5.3 kg (91.4%) | 81 % | 4 |
| Grain | Rice, Flaked | 0.5 kg (8.6%) | 70 % | 2 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|----------|--------|----------|------------|
| Boil | lunga | 15 g | 60 min | 10 % |
| Boil | lunga | 20 g | 45 min | 10 % |
| Whirlpool | Sabro | 50 g | 1 min | 13 % |
| Whirlpool | Amarillo | 50 g | 1 min | 8.7 % |
| Dry Hop | Amarillo | 50 g | 2 day(s) | 8.7 % |
| Dry Hop | Sabro | 50 g | 2 day(s) | 13 % |
| Dry Hop | Galaxy | 50 g | 2 day(s) | 15 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------|-------|------|--------|------------|
| Saflager W 34/70 | Lager | Dry | 23 g | Fermentis |