

Nowofalowy pils

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **45**
- SRM **5.3**
- Style **Classic American Pilsner**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **120 min**
- Evaporation rate **10 %/h**
- Boil size **34.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **50 C**, Time **15 min**
- Temp **62 C**, Time **75 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **15 min** at **50C**
- Keep mash **75 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **22.6 liter(s)** of **76C** water or to achieve **34.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|--------------|-------|-----|
| Grain | Strzegom Pilzneński | 5 kg (83.3%) | 80 % | 4 |
| Grain | Karmelowy Jasny 30EBC | 1 kg (16.7%) | 75 % | 30 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|-----------|------------|
| Boil | Marynka | 33 g | 50 min | 8 % |
| Aroma (end of boil) | Topaz | 30 g | 12 min | 15 % |
| Whirlpool | Citra | 25 g | 5 min | 12 % |
| Whirlpool | Topaz | 20 g | 5 min | 15 % |
| Dry Hop | Topaz | 25 g | 14 day(s) | 15 % |
| Dry Hop | Citra | 25 g | 14 day(s) | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------------|-------|--------|--------|------------------|
| FM30 Bohemska rapsodia | Lager | Liquid | 300 ml | Fermentum Mobile |