

Nowofalowy Pils

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **40**
- SRM **3.8**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **10 %**
- Size with trub loss **12.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **14.2 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **5.65 liter(s) / kg**
- Mash size **16 liter(s)**
- Total mash volume **18.9 liter(s)**

Steps

- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **77 C**, Time **5 min**

Mash step by step

- Heat up **16 liter(s)** of strike water to **66.8C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **77C**
- Sparge using **1 liter(s)** of **76C** water or to achieve **14.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Mep@ Pils	2.65 kg (93.3%)	82 %	4
Grain	Weyermann Carapils	0.15 kg (5.3%)	78 %	4
Grain	Weyermann Zakwaszający	0.04 kg (1.4%)	80 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga Polish Hops	10 g	60 min	10 %
Boil	Simcoe	5 g	20 min	13.2 %
Boil	El Dorado	5 g	20 min	15.1 %
Aroma (end of boil)	Simcoe	15 g	1 min	13.2 %
Aroma (end of boil)	El Dorado	10 g	1 min	15.1 %
Dry Hop	Simcoe	10 g	4 day(s)	13.2 %
Dry Hop	El Dorado	15 g	4 day(s)	15.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
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FM31 Bawarska Dolina	Lager	Liquid	1300 ml	Fermentum Mobile
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