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

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.