Niskoalkoholowa APA

- Gravity **6.8 BLG**
- ABV **2.6 %**
- IBU **27**
- SRM **2.7**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **50 liter(s)**
- Trub loss **2 %**
- Size with trub loss **53 liter(s)**
- Boil time **30 min**
- Evaporation rate **7 %/h**
- Boil size **57.4 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.6 liter(s)**
- Total mash volume **25.2 liter(s)**

Steps

- Temp **82 C**, Time **30 min**
- Temp **80 C**, Time **5 min**

Mash step by step

- Heat up **19.6 liter(s)** of strike water to **88.6C**
- Add grains
- Keep mash **5 min** at **80C**
- Keep mash **30 min** at **82C**
- Sparge using **43.4 liter(s)** of **76C** water or to achieve **57.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	4 kg *(65.6%)*	82 %	4
Grain	Monachijski typ II 20-25 EBC Weyermann	0.5 kg *(8.2%)*	80 %	20
Grain	Chit Malt	0.5 kg *(8.2%)*	50 %	2
Grain	Viking Melanoidynowy	0.1 kg *(1.6%)*	75 %	60
Grain	płatki ryżowe	0.5 kg *(8.2%)*	80 %	2
Sugar	cukier erytrytol	0.5 kg *(8.2%)*	--- %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Whirlpool	lunga 80 C	100 g	15 min	12.4 %
Whirlpool	Cascade 80 C	100 g	20 min	5.9 %

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