Low-alc APA

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **19**
- SRM **4.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **33 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.2 liter(s)**
- Total mash volume **21.6 liter(s)**

Steps

- Temp **74 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **16.2 liter(s)** of strike water to **83C**
- Add grains
- Keep mash **60 min** at **74C**
- Keep mash **1 min** at **78C**
- Sparge using **22.2 liter(s)** of **76C** water or to achieve **33 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	1 kg *(18.5%)*	80 %	4
Grain	Strzegom Pale Ale	3 kg *(55.6%)*	79 %	6
Grain	Strzegom Wiedeński	1 kg *(18.5%)*	79 %	10
Grain	Carared	0.2 kg *(3.7%)*	75 %	39
Grain	Weyermann - Carapils	0.2 kg *(3.7%)*	78 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Whirlpool	Zula	20 g	20 min	7 %
Whirlpool	El Dorado	20 g	20 min	15 %
Whirlpool	Idaho 7	20 g	20 min	12 %
Dry Hop	Zula	120 g	3 day(s)	7 %
Dry Hop	El Dorado	30 g	3 day(s)	15 %
Dry Hop	Idaho 7	30 g	3 day(s)	14 %

Yeasts

Name	Type	Form	Amount	Laboratory

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

FM52 Amerykański Sen	Ale	Liquid	1000 ml	Fermentum Mobile

Extras

Type	Name	Amount	Use for	Time
Water Agent	Pozywka dla drozdzy	3 g	Boil	2 min