Autumn APA

- Gravity **12.6 BLG**
- ABV **---**
- IBU **46**
- SRM **7.8**
- 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 **15 %/h**
- Boil size **33.7 liter(s)**

Mash information

- Mash efficiency **76 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **27 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **76C**
- Sparge using **18.7 liter(s)** of **76C** water or to achieve **33.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	5 kg *(83.3%)*	80 %	6
Grain	Karmelowy jasny	1 kg *(16.7%)*	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus	20 g	60 min	15 %
Boil	Iunga	10 g	60 min	11 %
Boil	Columbus	10 g	20 min	15 %
Aroma (end of boil)	Ahtanum	25 g	0 min	5 %
Dry Hop	Simcoe	50 g	4 day(s)	10 %
Dry Hop	Equinox	50 g	4 day(s)	13.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	11 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips piwowarski	5 g	Mash	---

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

Water Agent	Chlorek wapnia	5 g	Mash	---