

APA 3

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **35**
- SRM **5.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **18.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **12.4 liter(s)**
- Total mash volume **15.5 liter(s)**

Steps

- Temp **67 C**, Time **60 min**

Mash step by step

- Heat up **12.4 liter(s)** of strike water to **72.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **9 liter(s)** of **76C** water or to achieve **18.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.2 kg (71%)	81 %	4
Grain	Strzegom Karmel 30	0.3 kg (9.7%)	75 %	30
Grain	Strzegom Monachijski typ II	0.5 kg (16.1%)	--- %	22
Grain	Oats, Flaked	0.1 kg (3.2%)	--- %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	5 g	30 min	13 %
Aroma (end of boil)	Chinook	5 g	15 min	13 %
Aroma (end of boil)	Mosaic	5 g	15 min	10 %
Whirlpool	Mosaic	5 g	0 min	10 %
Dry Hop	Cascade	10 g	7 day(s)	6 %
Dry Hop	Oktawia	10 g	7 day(s)	7.1 %
Boil	Mosaic	5 g	30 min	10 %
Boil	Magnum	5 g	60 min	12 %

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	3 g	Boil	60 min
Water Agent	gips piwowarski	2 g	Mash	60 min