

Żytnia APA

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **39**
- SRM **6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.3 liter(s)**
- Total mash volume **24.4 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzniejszy	3.5 kg (57.4%)	80 %	4
Grain	Żytni	2 kg (32.8%)	85 %	8
Grain	Carahell	0.3 kg (4.9%)	77 %	26
Grain	Karmelowy Czerwony	0.3 kg (4.9%)	75 %	59

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus	25 g	60 min	14.5 %
Aroma (end of boil)	Cascade	20 g	15 min	6 %
Aroma (end of boil)	Centennial	20 g	0 min	8.5 %
Dry Hop	Cascade	20 g	4 day(s)	6 %
Dry Hop	Centennial	20 g	4 day(s)	8.5 %

Yeasts

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