

ŻYTANIA APA II

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **27**
- SRM **5.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **12.2 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **12.2 liter(s)** of strike water to **68.5C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.2 kg (27.9%)	80 %	5
Grain	Żytńi	2.5 kg (58.1%)	85 %	8
Adjunct	Płatki owsiane	0.5 kg (11.6%)	85 %	3
Grain	Strzegom Karmel 150	0.1 kg (2.3%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	10 %
Boil	Mosaic	10 g	15 min	10 %
Boil	Citra	15 g	0 min	12 %
Dry Hop	jaryllo	10 g	7 day(s)	12 %
Dry Hop	amarillo	10 g	7 day(s)	10 %
Dry Hop	Mosaic	10 g	5 day(s)	10 %
Dry Hop	Amarillo	10 g	5 day(s)	9.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
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FM50 Kłosy Kansas	Wheat	Slant	1000 ml	Fermentum Mobile
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