

Żapa

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **25**
- SRM **4.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **27 liter(s)**
- Trub loss **10 %**
- Size with trub loss **29.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **37.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **24.7 liter(s)**
- Total mash volume **31.7 liter(s)**

Steps

- Temp **64 C**, Time **55 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **24.7 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **55 min** at **64C**
- Keep mash **5 min** at **78C**
- Sparge using **19.7 liter(s)** of **76C** water or to achieve **37.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	6 kg (85.1%)	80 %	5
Grain	Płatki żytnie	0.8 kg (11.3%)	60 %	3
Grain	Karmelowy Jasny 30EBC	0.25 kg (3.5%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	30 g	60 min	11 %
Boil	Zythos	30 g	0 min	9.2 %
Boil	Saaz (Czech Republic)	60 g	0 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Kveik SKARE	Lager	Slant	10 ml	2 łyżki stolowe