

Żongler- Limon Apa

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **47**
- SRM **4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **20.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **55 C**, Time **20 min**
- Temp **70 C**, Time **40 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **20 min** at **55C**
- Keep mash **40 min** at **70C**
- Sparge using **12.7 liter(s)** of **76C** water or to achieve **20.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (75%)	80 %	5
Grain	Strzegom Pilzneński	1 kg (25%)	80 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Ekuanot	15 g	60 min	14.5 %
Aroma (end of boil)	Ekuanot	15 g	20 min	14.5 %
Aroma (end of boil)	Ekuanot	30 g	0 min	14.5 %