Weselne

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **34**
- SRM **4.7**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **54 liter(s)**
- Trub loss **8 %**
- Size with trub loss **58.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **70.1 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **48.9 liter(s)**
- Total mash volume **61.1 liter(s)**

Steps

- Temp **68 C**, Time **60 min**

Mash step by step

- Heat up **48.9 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **33.4 liter(s)** of **76C** water or to achieve **70.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.84 kg *(23.3%)*	80 %	5
Grain	Strzegom Pilzneński	8.53 kg *(69.8%)*	80 %	4
Grain	Karmelowy Czerwony	0.85 kg *(7%)*	75 %	50

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	62.53 g	40 min	10 %
Boil	Cascade	34.11 g	15 min	6 %
Aroma (end of boil)	Lublin (Lubelski)	85.26 g	5 min	4 %
Aroma (end of boil)	Citra	51.16 g	5 min	12 %