127

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **47**
- SRM **6.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.9 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **69 C**, Time **80 min**
- Temp **75 C**, Time **10 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **80 min** at **69C**
- Keep mash **10 min** at **75C**
- Sparge using **21.9 liter(s)** of **76C** water or to achieve **31.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski	4 kg *(80%)*	80 %	16
Grain	Pszeniczny	1 kg *(20%)*	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	45 g	80 min	10 %
Aroma (end of boil)	Lublin (Lubelski)	140 g	1 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	250 ml	#121