

Wolna Amerykanka

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **78**
- SRM **4.4**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **26.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.4 liter(s)**
- Total mash volume **27.2 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilznieński	4.2 kg (61.8%)	81 %	4
Grain	Pszeniczny	2.1 kg (30.9%)	85 %	4
Grain	Płatki owsiane	0.5 kg (7.4%)	60 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	35 g	60 min	15.5 %
Aroma (end of boil)	Equinox	30 g	10 min	13.1 %
Aroma (end of boil)	Equinox	20 g	5 min	13.1 %
Whirlpool	Equinox	50 g	10 min	13.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM54 Gorączka kalifornijska	Ale	Slant	300 ml	Fermentum Mobile