

Winetou

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **26**
- SRM **6.5**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.4 liter(s)**
- Total mash volume **31.2 liter(s)**

Steps

- Temp **65 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **75 C**, Time **5 min**

Mash step by step

- Heat up **23.4 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **50 min** at **65C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **75C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4 kg (51.3%)	80 %	4
Grain	Strzegom Wiedeński	1.5 kg (19.2%)	79 %	10
Grain	Strzegom Monachijski typ I	1.5 kg (19.2%)	79 %	16
Grain	Pszenica niestodowana	0.8 kg (10.3%)	75 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	20 g	60 min	12 %
Aroma (end of boil)	Chinook	10 g	10 min	12 %
Aroma (end of boil)	Ahtanum	10 g	10 min	4 %
Whirlpool	Ahtanum	20 g	1 min	1 %
Whirlpool	Columbus/Tomahawk/Zeus	20 g	1 min	15.5 %
Whirlpool	Equinox	20 g	1 min	13.1 %
Dry Hop	Equinox	10 g	5 day(s)	13.1 %
Dry Hop	Columbus/Tomahawk/Zeus	10 g	5 day(s)	15.5 %
Dry Hop	Citra	20 g	5 day(s)	12 %

Dry Hop	Waimea	30 g	5 day(s)	17 %
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Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis