

fajne piwko

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **42**
- SRM **7.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **32 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **75 C**, Time **5 min**

Mash step by step

- Heat up **24 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **75C**
- Sparge using **11.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód pale ale Bruntal - Raven Trading	5 kg (62.5%)	75 %	7.5
Grain	Słód pszeniczny Bruntal - Soufflet	0.5 kg (6.3%)	75 %	6
Grain	Słód wiedeński Bruntal - Raven Trading	1.5 kg (18.8%)	75 %	12
Grain	Słód karmelowy carahel (carapilss)	0.5 kg (6.3%)	75 %	30
Grain	Słód Castle Malting	0.5 kg (6.3%)	75 %	8

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chmiel Columbus (Tomahawk, Zeus) - (USA) - granulát	20 g	60 min	15.8 %
Aroma (end of boil)	Chmiel Ahtanum (USA)	40 g	15 min	4.4 %
Aroma (end of boil)	Chmiel Styrian Bobek (SLO)	40 g	10 min	6.2 %

Dry Hop	Chmiel Ahtanum (USA)	60 g	3 day(s)	4.4 %
Dry Hop	Chmiel Styrian Bobek (SLO)	60 g	3 day(s)	6.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Dry	11 g	Danstar