IPAale

- Gravity **14.7 BLG**
- ABV **---**
- IBU **40**
- SRM **9**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **25.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	5 kg *(90.7%)*	80 %	7
Grain	Caramel/Crystal Malt - 10L	0.5 kg *(9.1%)*	75 %	20
Grain	Strzegom Czekoladowy 1200	0.01 kg *(0.2%)*	68 %	1202

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	10 g	60 min	13 %
Boil	Cascade	10 g	60 min	6 %
Boil	Chinook	5 g	10 min	13 %
Boil	Cascade	5 g	10 min	6 %
Aroma (end of boil)	Chinook	15 g	15 min	13 %
Aroma (end of boil)	Cascade	15 g	15 min	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	150 ml	Safale

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.