whatZapp Hazzy Pale Ale

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **48**
- SRM **3.2**
- Style **Specialty Beer**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.6 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.1 liter(s)**
- Total mash volume **17.5 liter(s)**

Steps

- Temp **68 C**, Time **90 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **13.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **19.9 liter(s)** of **76C** water or to achieve **28.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.5 kg *(80%)*	81 %	4
Grain	Słód owsiany Fawcett	0.625 kg *(14.3%)*	61 %	5
Grain	carabody	0.25 kg *(5.7%)*	75 %	8

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	zappa	25 g	60 min	9 %
Boil	zappa	40 g	10 min	9 %
Whirlpool	zappa	60 g	10 min	9 %
Dry Hop	zappa	75 g	6 day(s)	9 %

Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Slant	0.5 ml	Danstar