

Brackie IIPA

- Gravity **20.5 BLG**
- ABV **9 %**
- IBU **87**
- SRM **8.4**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **80 min**
- Evaporation rate **15 %/h**
- Boil size **28.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.9 liter(s)**
- Total mash volume **30.6 liter(s)**

Steps

- Temp **53 C**, Time **5 min**
- Temp **66 C**, Time **45 min**
- Temp **71 C**, Time **15 min**
- Temp **77 C**, Time **4 min**

Mash step by step

- Heat up **22.9 liter(s)** of strike water to **58.5C**
- Add grains
- Keep mash **5 min** at **53C**
- Keep mash **45 min** at **66C**
- Keep mash **15 min** at **71C**
- Keep mash **4 min** at **77C**
- Sparge using **13.6 liter(s)** of **76C** water or to achieve **28.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5.5 kg (67.5%)	81 %	4
Grain	Pszeniczny	0.85 kg (10.4%)	85 %	4
Grain	Monachijski	1 kg (12.3%)	80 %	23
Grain	Cara Gold	0.3 kg (3.7%)	75 %	120
Sugar	cukier	0.5 kg (6.1%)	100 %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	50 g	60 min	11 %
Boil	Columbus/Tomahawk/Zeus	25 g	30 min	14.4 %
Boil	Simcoe	25 g	25 min	11.5 %
Boil	Cascade	25 g	10 min	6 %
Boil	Ahtanum	50 g	5 min	5 %