

English India Pale Ale

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **44**
- SRM **10.6**
- Style **English IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **26.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.3 liter(s)**
- Total mash volume **27.4 liter(s)**

Steps

- Temp **68 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **21.3 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **40 min** at **68C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **11.4 liter(s)** of **76C** water or to achieve **26.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	5.5 kg (90.2%)	85 %	7
Grain	Weyermann - Caraamber	0.3 kg (4.9%)	75 %	65
Grain	Karmelowy Jasny 30EBC	0.2 kg (3.3%)	75 %	30
Grain	Strzegom Karmel 600	0.1 kg (1.6%)	68 %	601

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Horizon	20 g	65 min	10 %
Boil	Marynka	17 g	65 min	10 %
Aroma (end of boil)	Willamette	10 g	15 min	5 %
Aroma (end of boil)	Horizon	10 g	15 min	10 %
Aroma (end of boil)	East Kent Goldings	20 g	1 min	5.1 %
Aroma (end of boil)	Willamette	10 g	1 min	5 %
Dry Hop	East Kent Goldings	10 g	3 day(s)	5.1 %
Dry Hop	Willamette	10 g	3 day(s)	5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale