

India Pale Ale

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **45**
- SRM **11**
- Style **English IPA**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.1 liter(s)**
- Total mash volume **28.4 liter(s)**

Steps

- Temp **63 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **7 min**

Mash step by step

- Heat up **22.1 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **50 min** at **63C**
- Keep mash **10 min** at **72C**
- Keep mash **7 min** at **78C**
- Sparge using **14.6 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3 kg (47.6%)	81 %	4
Grain	PALE ALE Wayermann 5,5-7,5 EBC 1kg	3 kg (47.6%)	80 %	7
Grain	SPECIAL B Castle Malting 400 EBC 1kg	0.3 kg (4.8%)	80 %	400

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra USA 30g	30 g	30 min	12.8 %
Boil	Citra USA 30g	30 g	15 min	12.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M36	Ale	Dry	10 g	Mangrove Jack's