

India export porter

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **67**
- SRM **27.8**
- Style **Robust Porter**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14 liter(s)**

Mash information

- Mash efficiency **74 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.4 liter(s)**
- Total mash volume **15.9 liter(s)**

Steps

- Temp **68 C**, Time **60 min**

Mash step by step

- Heat up **12.4 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **5.1 liter(s)** of **76C** water or to achieve **14 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2.6 kg (73.4%)	80 %	4
Grain	Monachijski	0.5 kg (14.1%)	80 %	16
Grain	Special B Malt	0.25 kg (7.1%)	65.2 %	315
Grain	Black (Patent) Malt	0.13 kg (3.7%)	55 %	1350
Grain	Brown Malt (British Chocolate)	0.06 kg (1.7%)	70 %	190

Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Columbus/Tomahawk/Zeus	15 g	60 min	14.4 %
Boil	Citra	15 g	10 min	12.5 %
Boil	athanum	15 g	10 min	3.6 %
Boil	Mosaic	10 g	10 min	13.2 %
Aroma (end of boil)	Citra	15 g	0 min	12.5 %
Aroma (end of boil)	Athanium	15 g	0 min	3.6 %

Yeasts

Name	Type	Form	Amount	Laboratory
hornindal	Ale	Liquid	1000 ml	omega