

# lunga ipa

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **63**
- SRM **10.4**
- Style **English IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **76 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.6 liter(s)**
- Total mash volume **25.2 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **19.6 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **1 min** at **76C**
- Sparge using **11.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.5 kg (80.4%)	81 %	4
Grain	caramel aromatic	0.5 kg (8.9%)	78 %	180
Grain	Spelt castle malting orkiszowy	0.6 kg (10.7%)	81 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga szyszka ogródkowa	40 g	60 min	10.5 %
Aroma (end of boil)	lunga szyszka ogródkowa	30 g	5 min	10.5 %
Whirlpool	lunga szyszka ogródkowa	30 g	30 min	10.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - Kolsch	Ale	Slant	300 ml	---

## Extras

Type	Name	Amount	Use for	Time
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Water Agent	gips piwowarski	4 g	Mash	---
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