

# Ella

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **33**
- SRM **5.8**
- Style **English IPA**

## Batch size

- Expected quantity of finished beer **51 liter(s)**
- Trub loss **5 %**
- Size with trub loss **53.5 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **65.4 liter(s)**

## Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **31.5 liter(s)**
- Total mash volume **44.1 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**

## Mash step by step

- Heat up **31.5 liter(s)** of strike water to **75.2C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Sparge using **46.5 liter(s)** of **76C** water or to achieve **65.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	11 kg (87.3%)	80 %	7
Grain	Żytni	1 kg (7.9%)	85 %	8
Grain	Biscuit Malt	0.3 kg (2.4%)	79 %	45
Grain	Caramel/Crystal Malt - 30L	0.3 kg (2.4%)	75 %	59

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Ella (AUS)	60 g	30 min	16.7 %
Dry Hop	Ella (AUS)	40 g	3 day(s)	16.7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
WLP007 - Dry English Ale Yeast	Ale	Liquid	600 ml	White Labs
Gęstwa				

## Extras

Type	Name	Amount	Use for	Time
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Water Agent	Gips	5 g	Mash	50 min
Water Agent	Lactol	4 g	Mash	---