

Southern promise

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **39**
- SRM **4.2**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.9 liter(s)**
- Total mash volume **22.6 liter(s)**

Steps

- Temp **63 C**, Time **15 min**
- Temp **72 C**, Time **45 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **16.9 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **15 min** at **63C**
- Keep mash **45 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód pszeniczny Bestmalz	0.09 kg (1.6%)	82 %	5
Grain	Słód pilznieński Castlemalting	2.5 kg (44.3%)	81 %	3.5
Grain	Thomas Fawcett Pale Cara	0.5 kg (8.9%)	80 %	9
Grain	Thomas Fawcett Golden Promise	2.5 kg (44.3%)	81 %	4
Grain	Thomas Fawcett Pale Crystal	0.05 kg (0.9%)	81 %	90

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Southern Passion - RPA	20 g	60 min	11.7 %
Boil	Southern Passion - RPA	20 g	15 min	11.7 %
Boil	Southern Passion - RPA	20 g	5 min	11.7 %
Aroma (end of boil)	Southern Passion - RPA	20 g	0 min	11.7 %

Dry Hop	Southern Passion - RPA	20 g	3 day(s)	11.7 %
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Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Dry	10 g	Mangrove Jack's

Extras

Type	Name	Amount	Use for	Time
Fining	Irish Moss	5 g	Boil	15 min