

SweetBitternessOfFall

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **47**
- SRM **7.4**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **22.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.6 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **28.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **20.1 liter(s)**
- Total mash volume **25.9 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **2 min**

Mash step by step

- Heat up **20.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **2 min** at **76C**
- Sparge using **14.6 liter(s)** of **76C** water or to achieve **28.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Castle Pale Ale	5 kg (87%)	80 %	8
Grain	Amber Malt	0.5 kg (8.7%)	75 %	70
Grain	Weyermann - Acidulated Malt	0.25 kg (4.3%)	80 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Iunga	19 g	70 min	11 %
Boil	Chinnok PL	15 g	30 min	10 %
Boil	Cascade PL	15 g	25 min	5.2 %
Boil	Cascade PL	15 g	15 min	5.2 %
Boil	Chinook PL	15 g	10 min	10 %
Whirlpool	Cascade PL	20 g	20 min	5.2 %
Whirlpool	Chinook PL	20 g	20 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale

Extras

Type	Name	Amount	Use for	Time
Fining	Whirlfloc	1.25 g	Boil	10 min
Water Agent	Gips	4 g	Mash	---