

# Summer Ale

---

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **53**
- SRM **4.6**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **90 min**
- Evaporation rate **12 %/h**
- Boil size **25.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **5 liter(s) / kg**
- Mash size **24.5 liter(s)**
- Total mash volume **29.4 liter(s)**

## Steps

- Temp **66 C**, Time **120 min**
- Temp **72 C**, Time **30 min**
- Temp **77 C**, Time **15 min**

## Mash step by step

- Heat up **24.5 liter(s)** of strike water to **70.6C**
- Add grains
- Keep mash **120 min** at **66C**
- Keep mash **30 min** at **72C**
- Keep mash **15 min** at **77C**
- Sparge using **5.9 liter(s)** of **76C** water or to achieve **25.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	3 kg (56.6%)	81 %	6
Grain	Pilzneński	1.5 kg (28.3%)	81 %	4
Grain	Strzegom Pszeniczny	0.4 kg (7.5%)	81 %	6
Sugar	Dememera Sugar	0.4 kg (7.5%)	100 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Fuggles	30 g	90 min	5.6 %
First Wort	East Kent Goldings	40 g	90 min	5.4 %
Boil	East Kent Goldings	40 g	5 min	5.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM10 O czym szumią wierzby	Ale	Liquid	120 ml	---

## Extras

Type	Name	Amount	Use for	Time
Spice	Kolendra	10 g	Boil	5 min
Flavor	Candied ginger	10 g	Boil	5 min

## Notes

- wg Radical Brewing by Randy Mosher  
*Oct 30, 2018, 9:20 PM*