

English Hop Spell

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **41**
- SRM **11.3**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **33 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **39.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **32 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **24 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **76C**
- Sparge using **23.6 liter(s)** of **76C** water or to achieve **39.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale Zero	5 kg (62.5%)	80 %	5
Grain	Monachijski	2 kg (25%)	80 %	16
Grain	Strzegom Karmel 150	1 kg (12.5%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Pioneer	50 g	25 min	9.5 %
Boil	Endeavour	50 g	25 min	7.5 %
Dry Hop	Jetser@	50 g	7 day(s)	6.9 %
Dry Hop	Archer@	50 g	7 day(s)	4.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
Bulldog B1 Universal Ale	Ale	Dry	10 g	Bulldog