

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 |