

## tiny bottom clawhammer

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **39**
- SRM **6.9**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **16.3 liter(s)**
- Total mash volume **21 liter(s)**

### Steps

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

### Mash step by step

- Heat up **16.3 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **13.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

| Type  | Name                   | Amount         | Yield  | EBC |
|-------|------------------------|----------------|--------|-----|
| Grain | BESTMALZ - Best Pilsen | 3.5 kg (74.9%) | 80.5 % | 4   |
| Grain | Karmelowy Jasny 30EBC  | 0.35 kg (7.5%) | 75 %   | 30  |
| Grain | Strzegom Wiedeński     | 0.27 kg (5.8%) | 79 %   | 10  |
| Grain | Biscuit Malt           | 0.25 kg (5.4%) | 79 %   | 45  |
| Grain | Strzegom Karmel 150    | 0.15 kg (3.2%) | 75 %   | 150 |
| Grain | Castle Pale Ale        | 0.15 kg (3.2%) | 80 %   | 8   |

### Hops

| Use for | Name               | Amount | Time   | Alpha acid |
|---------|--------------------|--------|--------|------------|
| Boil    | Fuggles            | 20 g   | 60 min | 4.5 %      |
| Boil    | East Kent Goldings | 20 g   | 60 min | 5.1 %      |
| Boil    | Fuggles            | 20 g   | 20 min | 4.5 %      |
| Boil    | East Kent Goldings | 20 g   | 20 min | 5.1 %      |
| Boil    | Fuggles            | 30 g   | 5 min  | 4.5 %      |
| Boil    | East Kent Goldings | 20 g   | 5 min  | 5.1 %      |

### Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|             |     |     |        |        |
|-------------|-----|-----|--------|--------|
| Safale S-04 | Ale | Dry | 11.5 g | Safale |
|-------------|-----|-----|--------|--------|

### Extras

| Type   | Name     | Amount | Use for | Time  |
|--------|----------|--------|---------|-------|
| Fining | wirflock | 0.5 g  | Boil    | 7 min |

### Notes

- drożdże angielskie ~CZ. Dziełak~:  
Po dwóch/trzech dniach mogą zjeść wszystko i trzeba wychwycić podniesienie temperatury, żeby na spokojnie dojadły, a nie rozleniwiły się.  
*Jan 18, 2019, 12:56 PM*