

## 11A SKULL CANDY brewdog

- Gravity **9 BLG**
- ABV **3.5 %**
- IBU **27**
- SRM **7.5**
- Style **Standard/Ordinary Bitter**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **24.7 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **5.35 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **21.4 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **18 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **10.1 liter(s)** of **76C** water or to achieve **24.7 liter(s)** of wort

### Fermentables

| Type  | Name                   | Amount          | Yield | EBC |
|-------|------------------------|-----------------|-------|-----|
| Grain | Simpsons - Maris Otter | 2.55 kg (75.7%) | 81 %  | 6   |
| Grain | Karmelowy Jasny 30EBC  | 0.55 kg (16.3%) | 75 %  | 30  |
| Grain | Strzegom Karmel 150    | 0.27 kg (8%)    | 75 %  | 150 |

### Hops

| Use for             | Name               | Amount | Time   | Alpha acid |
|---------------------|--------------------|--------|--------|------------|
| Boil                | East Kent Goldings | 25 g   | 60 min | 5.1 %      |
| Aroma (end of boil) | Challenger         | 25 g   | 15 min | 7 %        |

### Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 10 g   | ---        |

### Extras

| Type        | Name  | Amount | Use for | Time   |
|-------------|-------|--------|---------|--------|
| Water Agent | CaSO4 | 4 g    | Boil    | 60 min |