

Bitter

- Gravity **12.1 BLG**
- ABV ---
- IBU **39**
- SRM **11.3**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **5 liter(s) / kg**
- Mash size **27 liter(s)**
- Total mash volume **32.4 liter(s)**

Steps

- Temp **65 C**, Time **60 min**

Mash step by step

- Heat up **27 liter(s)** of strike water to **69.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Sparge using **4.8 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------|---------------|-------|-----|
| Grain | Colorado - Pale Malt | 2 kg (37%) | 81 % | 4 |
| Grain | Mild Malt | 2 kg (37%) | 80 % | 8 |
| Grain | Colorado - Honig Malt | 0.5 kg (9.3%) | 80 % | 15 |
| Grain | Fawcett Amber | 0.2 kg (3.7%) | 70 % | 125 |
| Grain | Strzegom Pszeniczny | 0.5 kg (9.3%) | 81 % | 6 |
| Grain | Bestmalz - Special X | 0.1 kg (1.9%) | 80 % | 400 |
| Grain | Bestmalz - Special X | 0.1 kg (1.9%) | 80 % | 400 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------------|--------|--------|------------|
| Boil | Bramling Cross | 20 g | 45 min | 4 % |
| Boil | Pilgrim | 15 g | 45 min | 8.5 % |
| Boil | Bramling Cross | 15 g | 30 min | 4 % |
| Boil | Pilgrim | 15 g | 15 min | 8.5 % |
| Boil | Bramling Cross | 15 g | 15 min | 4 % |
| Boil | Pilgrim | 20 g | 5 min | 8.5 % |

Yeasts

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

| | | | | |
|-----------------------------|-----|-------|-------|------------|
| WLP006 - Bedford British | Ale | Slant | 40 ml | White Labs |
| Safale US-05 | Ale | Dry | 11 g | Fermentis |

Notes

- Warka dzielona, różne drożdże
May 1, 2017, 9:53 AM