

Double Ale #2

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **64**
- SRM **9.7**
- Style **American Brown Ale**

Batch size

- Expected quantity of finished beer **180 liter(s)**
- Trub loss **5 %**
- Size with trub loss **189 liter(s)**
- Boil time **70 min**
- Evaporation rate **5 %/h**
- Boil size **211.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.85 liter(s) / kg**
- Mash size **140.2 liter(s)**
- Total mash volume **189.4 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **140.2 liter(s)** of strike water to **71.7C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **30 min** at **72C**
- Sparge using **120.5 liter(s)** of **76C** water or to achieve **211.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|----------------------------------|-----------------|-------|------|
| Grain | Briess - Pale Ale Malt | 31.5 kg (59.2%) | 80 % | 7 |
| Grain | Strzegom Pszeniczny | 6 kg (11.3%) | 81 % | 6 |
| Grain | Briess - Pale Ale Malt | 5 kg (9.4%) | 80 % | 7.5 |
| Adjunct | Płatki owsiane | 4 kg (7.5%) | 60 % | 3 |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.5 kg (0.9%) | 73 % | 1001 |
| Grain | słód enzymatyczny | 1.2 kg (2.3%) | 76 % | 10 |
| Grain | Strzegom Monachijski typ I | 5 kg (9.4%) | 79 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Magnum | 100 g | 70 min | 13.5 % |
| Boil | Magnat | 100 g | 70 min | 11.2 % |
| Boil | lunga | 200 g | 70 min | 11 % |
| Boil | Lublin (Lubelski) | 250 g | 5 min | 4 % |
| Boil | Oktawia | 170 g | 10 min | 7.1 % |
| Boil | Cascade PL | 300 g | 5 min | 5.2 % |

| | | | | |
|-----------|-------------------|-------|-------|-------|
| Whirlpool | Cascade PL | 300 g | 1 min | 5.2 % |
| Whirlpool | Lublin (Lubelski) | 250 g | 1 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 100 g | Fermentis |