

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **63**
- SRM **44.9**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **32.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.5 liter(s)**
- Total mash volume **30 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **22.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **17.2 liter(s)** of **76C** water or to achieve **32.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------------|---------------|-------|------|
| Grain | Strzegom Pale Ale | 3 kg (40%) | 79 % | 6 |
| Grain | Strzegom Pilzneński | 2 kg (26.7%) | 80 % | 4 |
| Grain | Weyermann pszeniczny jasny | 0.5 kg (6.7%) | 80 % | 4 |
| Grain | Strzegom Karmel 150 | 0.5 kg (6.7%) | 75 % | 150 |
| Grain | Black Castle Malting | 1 kg (13.3%) | 65 % | 1200 |
| Grain | Płatki owsiane | 0.5 kg (6.7%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|-----------|------------|
| Boil | Simcoe | 25 g | 60 min | 13.6 % |
| Boil | Citra | 15 g | 60 min | 11.6 % |
| Boil | Simcoe | 25 g | 15 min | 13.6 % |
| Boil | Citra | 15 g | 15 min | 11.6 % |
| Dry Hop | cashmere | 50 g | 18 day(s) | 8.3 % |
| Dry Hop | Amarillo | 50 g | 18 day(s) | 7.3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|-------------|-------------|---------------|-------------------|
| Safale US-05 | Ale | Dry | 11.5 g | safale |