

Bokser

- Gravity **15.7 BLG**
- ABV ---
- IBU **120**
- SRM **46.1**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **26.5 liter(s)**
- Trub loss **10 %**
- Size with trub loss **29.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **32 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **25.9 liter(s)**
- Total mash volume **34 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Briess - Pale Ale Malt | 5.6 kg (69.1%) | 80 % | 7 |
| Grain | Strzegom Monachijski typ II | 1 kg (12.3%) | 79 % | 22 |
| Grain | Briess - Rye Malt | 0.5 kg (6.2%) | 80 % | 7 |
| Grain | Carafa III Special | 0.5 kg (6.2%) | 70 % | 1034 |
| Grain | Weyermann - Carawheat | 0.3 kg (3.7%) | 77 % | 97 |
| Grain | Strzegom Czekoladowy ciemny | 0.2 kg (2.5%) | 68 % | 1200 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|----------|------------|
| Boil | Magnum | 20 g | 60 min | 11.5 % |
| Boil | Columbus/Tomahawk/Zeus | 30 g | 60 min | 15.5 % |
| Boil | Columbus/Tomahawk/Zeus | 70 g | 10 min | 12.5 % |
| Boil | Chinook | 20 g | 10 min | 13 % |
| Boil | Cascade | 100 g | 5 min | 6 % |
| Boil | Simcoe | 150 g | 5 min | 11.4 % |
| Boil | Chinook | 30 g | 5 min | 13 % |
| Dry Hop | Columbus/Tomahawk/Zeus | 50 g | 7 day(s) | 13 % |
| Dry Hop | Chinook | 100 g | 7 day(s) | 13 % |
| Dry Hop | Simcoe | 50 g | 7 day(s) | 11.4 % |
| Dry Hop | Cascade | 50 g | 7 day(s) | 6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 23 g | Safale |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|-------|
| Fining | mech irlandzki | 5 g | Boil | 5 min |