

Black Quad

- Gravity **20 BLG**
- ABV **8.8 %**
- IBU **90**
- SRM **31**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **25.5 liter(s)**
- Total mash volume **34 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|----------------|--------|------|
| Grain | Pilznieński | 7.7 kg (84.6%) | 81 % | 4 |
| Grain | Pszeniczny | 0.3 kg (3.3%) | 85 % | 4 |
| Sugar | Candi Sugar, Clear | 0.6 kg (6.6%) | 78.3 % | 2 |
| Grain | Strzegom Barwiący | 0.4 kg (4.4%) | 68 % | 1300 |
| Grain | Strzegom pszenica prażona | 0.1 kg (1.1%) | 70 % | 1000 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------|--------|--------|------------|
| Dry Hop | Simcoe | 100 g | --- | 13.2 % |
| Dry Hop | Mosaic | 100 g | --- | 10 % |
| Aroma (end of boil) | Simcoe | 50 g | 10 min | 13.2 % |
| Aroma (end of boil) | Mosaic | 50 g | 10 min | 10 % |
| Boil | Simcoe | 50 g | 1 min | 13.2 % |
| Boil | Mosaic | 50 g | 1 min | 10 % |
| Boil | lunga | 65 g | 60 min | 11 % |