

BISON GRASS BLACK IPA

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **54**
- SRM **32.8**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|----------------------|---------------|-------|------|
| Grain | Viking Pale Ale malt | 3 kg (48.4%) | 80 % | 5 |
| Grain | Viking Pilsner malt | 2 kg (32.3%) | 82 % | 4 |
| Grain | Viking Barwiący | 0.2 kg (3.2%) | 65 % | 1400 |
| Grain | Carafa III | 0.3 kg (4.8%) | 70 % | 1034 |
| Grain | Crystal II 200 | 0.2 kg (3.2%) | 71 % | 200 |
| Adjunct | Briess - Oat Flakes | 0.5 kg (8.1%) | 80 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|------------------------|--------|----------|------------|
| Boil | Centennial | 25 g | 25 min | 10.5 % |
| Boil | Magnum | 10 g | 60 min | 13.5 % |
| Boil | Citra | 30 g | 10 min | 12 % |
| Whirlpool | Columbus/Tomahawk/Zeus | 40 g | 10 min | 15.5 % |
| Dry Hop | Citra | 70 g | 5 day(s) | 12 % |
| Dry Hop | Columbus/Tomahawk/Zeus | 30 g | 5 day(s) | 15.5 % |
| Dry Hop | Galaxy | 30 g | 5 day(s) | 15 % |