

Black IPA

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **64**
- SRM **32.7**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **10 %**
- Size with trub loss **27.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **32.9 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.25 liter(s) / kg**
- Mash size **26 liter(s)**
- Total mash volume **34 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------|---------------|-------|-----|
| Grain | Castle Pale Ale | 7 kg (87.5%) | 80 % | 8 |
| Grain | Black (Patent) Malt | 0.8 kg (10%) | 55 % | 985 |
| Grain | Cara Blonde - Castle Malting | 0.2 kg (2.5%) | 78 % | 20 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 40 g | 60 min | 16.5 % |
| Aroma (end of boil) | Citra | 25 g | 5 min | 12.8 % |
| Aroma (end of boil) | Galaxy | 25 g | 5 min | 13.6 % |
| Aroma (end of boil) | Citra | 25 g | 0 min | 12.8 % |
| Aroma (end of boil) | Galaxy | 25 g | 0 min | 13.6 % |