

IPA #13

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **56**
- SRM **30.8**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **550 liter(s)**
- Trub loss **5 %**
- Size with trub loss **583 liter(s)**
- Boil time **60 min**
- Evaporation rate **2 %/h**
- Boil size **622.7 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **455 liter(s)**
- Total mash volume **585 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|----------------|--|------------------|-------|------|
| Grain | Weyermann - Bohemian Pilsner Malt | 112.5 kg (85.9%) | 81 % | 4 |
| Grain | Weyermann - Rye Malt | 12.5 kg (9.5%) | 81 % | 7 |
| Grain | Carafa III | 5 kg (3.8%) | 70 % | 1400 |
| Liquid Extract | Briess LME - Maltoferm A-6000 (Black Malt Extract) | 1 kg (0.8%) | 78 % | 8350 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|---------|--------|--------|------------|
| Boil | Galaxy | 500 g | 60 min | 15.8 % |
| Whirlpool | Galaxy | 1000 g | 15 min | 15.8 % |
| Whirlpool | Chinook | 1000 g | 15 min | 10.5 % |