

## IPA #13

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- 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 %     |