

Black Ipa 39/68

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **55**
- SRM **25.6**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **27.4 liter(s)**
- Total mash volume **35.2 liter(s)**

Steps

- Temp **64 C**, Time **70 min**
- Temp **72 C**, Time **5 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **27.4 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **70 min** at **64C**
- Keep mash **5 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|-----------------|-------|-----|
| Grain | Pilzneński | 6.25 kg (76.9%) | 81 % | 4 |
| Grain | Strzegom Karmel 150 | 0.63 kg (7.7%) | 75 % | 30 |
| Grain | Carafa II | 0.63 kg (7.7%) | 70 % | 812 |
| Grain | Biscuit Malt | 0.31 kg (3.8%) | 79 % | 45 |
| Sugar | Cukier brązowy | 0.31 kg (3.8%) | --- % | --- |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|----------|------------|
| Boil | Centennial | 40 g | 60 min | 8.5 % |
| Boil | Cascade | 40 g | 45 min | 7.7 % |
| Boil | Fuggles | 40 g | 15 min | 4.5 % |
| Boil | Cascade | 40 g | 1 min | 7.7 % |
| Dry Hop | Cascade | 20 g | 4 day(s) | 7.7 % |
| Dry Hop | Centennial | 60 g | 4 day(s) | 10.5 % |
| Dry Hop | Fuggles | 60 g | 4 day(s) | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|-------------|-------------|---------------|-------------------|
| FM52 Amerykański Sen | Ale | Liquid | 150 ml | Fermentum Mobile |