

## black ipa na propsie

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **50**
- SRM **38.4**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **0 %**
- Size with trub loss **25 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **25.6 liter(s)**
- Total mash volume **32.9 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **25.6 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **12 liter(s)** of **76C** water or to achieve **30.3 liter(s)** of wort

### Fermentables

| Type  | Name                | Amount         | Yield | EBC  |
|-------|---------------------|----------------|-------|------|
| Grain | Fawcett chocolate   | 0.8 kg (11%)   | 68 %  | 1200 |
| Grain | Strzegom Pilzneński | 5.5 kg (75.3%) | 80 %  | 4    |
| Grain | Strzegom Wiedeński  | 1 kg (13.7%)   | 79 %  | 10   |

### Hops

| Use for             | Name                   | Amount | Time     | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil                | Columbus/Tomahawk/Zeus | 30 g   | 60 min   | 15.5 %     |
| Aroma (end of boil) | Sybilla                | 100 g  | 10 min   | 3.5 %      |
| Dry Hop             | Simcoe                 | 90 g   | 5 day(s) | 13.2 %     |

### Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11.5 g | Fermentis  |