

## i.p.a 12l

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **48**
- SRM **6.2**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **10 %**
- Size with trub loss **13.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.5 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.4 liter(s)**
- Total mash volume **12.6 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **9.4 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **10.2 liter(s)** of **76C** water or to achieve **16.5 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount          | Yield | EBC |
|-------|----------------------|-----------------|-------|-----|
| Grain | Viking Pale Ale malt | 2.64 kg (84%)   | 80 %  | 5   |
| Grain | Strzegom Pszeniczny  | 0.38 kg (12.2%) | 81 %  | 6   |
| Grain | Strzegom Karmel 150  | 0.12 kg (3.8%)  | 75 %  | 150 |

### Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | ekuanot | 9.6 g  | 60 min | 13.1 %     |
| Boil    | ekuanot | 12 g   | 15 min | 13.1 %     |
| Boil    | ekuanot | 19.2 g | 5 min  | 13.1 %     |
| Boil    | ekuanot | 28.8 g | 1 min  | 13.1 %     |

### Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 5.28 g | ---        |