

## Ko-op IPA

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **31**
- SRM **10.8**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **50 liter(s)**
- Trub loss **5 %**
- Size with trub loss **55 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **66 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **30 liter(s)**
- Total mash volume **42 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **30 liter(s)** of strike water to **77.6C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **48 liter(s)** of **76C** water or to achieve **66 liter(s)** of wort

### Fermentables

| Type    | Name                          | Amount        | Yield | EBC |
|---------|-------------------------------|---------------|-------|-----|
| Grain   | Strzegom Pale Ale             | 10 kg (76.9%) | 79 %  | 6   |
| Adjunct | Płatki owsiane                | 1 kg (7.7%)   | 85 %  | 3   |
| Grain   | Karmelowy Pszeniczny Strzegom | 2 kg (15.4%)  | 79 %  | 130 |

### Hops

| Use for             | Name     | Amount | Time     | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil                | Equinox  | 60 g   | 60 min   | 11 %       |
| Aroma (end of boil) | Mosaic   | 15 g   | 10 min   | 10 %       |
| Aroma (end of boil) | Citra    | 15 g   | 10 min   | 12 %       |
| Dry Hop             | Citra    | 15 g   | 3 day(s) | 12 %       |
| Dry Hop             | Amarillo | 30 g   | 3 day(s) | 9.5 %      |
| Dry Hop             | Cascade  | 30 g   | 3 day(s) | 6 %        |
| Dry Hop             | Mosaic   | 15 g   | 3 day(s) | 10 %       |

### Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11.5 g | Safale     |
| Safale K-97 | Ale  | Dry  | 11.5 g | Fermentis  |

## Notes

- Brzeczka podzielona na dwie części, fermentowana dwoma rodzajami drożdży  
*May 14, 2020, 12:16 AM*