

2. Cascade India Pale Ale - BARAN

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **41**
- SRM **4.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.7 liter(s) / kg**
- Mash size **11.6 liter(s)**
- Total mash volume **15.9 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **75 C**, Time **10 min**

Mash step by step

- Heat up **11.6 liter(s)** of strike water to **76.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **75C**
- Sparge using **19.1 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|--------------|-------|-----|
| Grain | Pale Ale | 2 kg (46.5%) | 80 % | 4 |
| Grain | Pilzneński | 1 kg (23.3%) | 85 % | 4 |
| Grain | Strzegom Monachijski typ I | 1 kg (23.3%) | 79 % | 16 |
| Grain | Pszeniczny | 0.3 kg (7%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil | Marynka | 20 g | 60 min | 8.9 % |
| Boil | Cascade | 20 g | 60 min | 6.7 % |
| Boil | Cascade | 10 g | 30 min | 6.7 % |
| Aroma (end of boil) | Cascade | 20 g | 1 min | 6.7 % |
| Dry Hop | cascade | 50 g | 5 day(s) | 6.7 % |

Yeasts

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