

American Bitter 12 BLG 20I

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **45**
- SRM **6.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **24.1 liter(s)**

Mash information

- Mash efficiency **84 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.9 liter(s)**
- Total mash volume **17.2 liter(s)**

Steps

- Temp **68 C**, Time **70 min**

Mash step by step

- Heat up **12.9 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **68C**
- Sparge using **15.5 liter(s)** of **76C** water or to achieve **24.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 4 kg (93%) | 80 % | 5 |
| Grain | Crystal II 200 | 0.2 kg (4.7%) | 71 % | 200 |
| Grain | Strzegom Monachijski typ II | 0.1 kg (2.3%) | 79 % | 12 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Apollo | 15 g | 60 min | 17 % |
| Boil | Cascade | 20 g | 10 min | 6 % |
| Boil | Citra | 20 g | 5 min | 12 % |
| Boil | Summit | 25 g | 3 min | 17 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
| us05 | Ale | Dry | 11.5 g | Fermentis |