

## #167 B jak Bardzo dobre amerykańskie żytanie

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **17**
- SRM **4.6**
- Style **American Wheat or Rye Beer**

### Batch size

- Expected quantity of finished beer **24.1 liter(s)**
- Trub loss **7 %**
- Size with trub loss **27.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **6 %/h**
- Boil size **29.4 liter(s)**

### Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.3 liter(s)**
- Total mash volume **24.8 liter(s)**

### Steps

- Temp **66 C**, Time **75 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **19.3 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **75 min** at **66C**
- Keep mash **5 min** at **78C**
- Sparge using **15.6 liter(s)** of **76C** water or to achieve **29.4 liter(s)** of wort

### Fermentables

| Type  | Name                                   | Amount          | Yield | EBC |
|-------|----------------------------------------|-----------------|-------|-----|
| Grain | No. 19 Floor Malt<br>Maris Otter Crisp | 1.66 kg (30.1%) | 80 %  | 6.5 |
| Grain | Weyermann<br>pilzneński premium        | 1.66 kg (30.1%) | 80 %  | 2   |
| Grain | Weyermann żytni<br>jasny               | 1.66 kg (30.1%) | 85 %  | 7   |
| Grain | Viking Malt<br>pszeniczny              | 0.33 kg (6%)    | 81 %  | 4   |
| Grain | Viking Malt cookie                     | 0.2 kg (3.6%)   | 80 %  | 50  |

### Hops

| Use for             | Name             | Amount | Time     | Alpha acid |
|---------------------|------------------|--------|----------|------------|
| Boil                | Ahhhroma US 2021 | 8 g    | 60 min   | 16.7 %     |
| Aroma (end of boil) | Ahhhroma US 2021 | 8 g    | 10 min   | 16.7 %     |
| Dry Hop             | Ahhhroma US 2021 | 34 g   | 7 day(s) | 16.7 %     |

### Yeasts

| Name                     | Type | Form  | Amount | Laboratory |
|--------------------------|------|-------|--------|------------|
| Lallemand Verdant<br>IPA | Ale  | Slant | 50 ml  | Lallemand  |