

USA nad Bałtykiem

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **19**
- SRM **18.6**
- Style **American Brown Ale**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **12.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.9 liter(s)**
- Total mash volume **9.2 liter(s)**

Steps

- Temp **55 C**, Time **5 min**
- Temp **64 C**, Time **25 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **6.9 liter(s)** of strike water to **60.9C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **25 min** at **64C**
- Keep mash **45 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **7.8 liter(s)** of **76C** water or to achieve **12.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Viking Vienna Malt | 0.6 kg (26%) | 79 % | 9 |
| Grain | Viking Munich Malt I | 0.6 kg (26%) | 78 % | 14 |
| Grain | Viking Munich Malt II | 0.6 kg (26%) | 78 % | 20 |
| Grain | Strzegom Karmel 150 | 0.2 kg (8.7%) | 75 % | 150 |
| Grain | Strzegom Czekoladowy jasny | 0.07 kg (3%) | 68 % | 400 |
| Grain | Strzegom Barwiący | 0.04 kg (1.7%) | 68 % | 1450 |
| Grain | płatki owsiane błyskawiczne | 0.2 kg (8.7%) | --- % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------------|--------|--------|------------|
| Boil | Mosaic 10,4%AA | 5 g | 60 min | 10.4 % |
| Aroma (end of boil) | Mosaic 10,4%AA | 5 g | 10 min | 10.4 % |
| Boil | Cascade 6,9%AA | 5 g | 10 min | 6.9 % |
| Aroma (end of boil) | Cascade 6,9%AA | 5 g | 0 min | 6.9 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|-------|--------|------------|
| S-04 | Ale | Slant | 30 ml | --- |