

American Hoppy Stout - Warka 2

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **48**
- SRM **37.6**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **21.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **30 liter(s)**

Steps

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

Mash step by step

- Heat up **24 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **8 liter(s)** of **76C** water or to achieve **26 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|----------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 4 kg (58.8%) | 80 % | 5 |
| Grain | Viking Munich Malt | 1 kg (14.7%) | 78 % | 25 |
| Grain | Jęczmień palony | 0.25 kg (3.7%) | 55 % | 985 |
| Adjunct | Płatki owsiane | 0.5 kg (7.4%) | 60 % | 3 |
| Grain | Karmelowy Czerwony | 0.25 kg (3.7%) | 75 % | 59 |
| Grain | Czekoladowy | 0.5 kg (7.4%) | 70 % | 1034 |
| Sugar | cukier | 0.3 kg (4.4%) | 100 % | 0 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil | Magnum | 25 g | 60 min | 13.5 % |
| Boil | Columbus/Tomahawk/Zeus | 25 g | 5 min | 15.5 % |
| Boil | Citra | 20 g | 5 min | 12 % |
| Boil | Simcoe | 25 g | 5 min | 13.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us-05 | Ale | Dry | 11 g | --- |