

German Ale #2

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **32**
- SRM **5.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20.7 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **22.6 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **15 min**

Mash step by step

- Heat up **17 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **72C**
- Sparge using **18.5 liter(s)** of **76C** water or to achieve **29.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pilsner malt | 5 kg (88.5%) | 82 % | 4 |
| Grain | Strzegom Bursztynowy | 0.5 kg (8.8%) | 70 % | 49 |
| Grain | Pszeniczny | 0.15 kg (2.7%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------------------|--------|----------|------------|
| Aroma (end of boil) | Perle | 50 g | 0 min | 5.5 % |
| Aroma (end of boil) | Hallertau Mittelfruh | 50 g | 0 min | 3 % |
| Dry Hop | Perle | 50 g | 2 day(s) | 5.5 % |
| Dry Hop | Hallertau Mittlefruh | 50 g | 2 day(s) | 3 % |
| Boil | Chinook | 40 g | 60 min | 8.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale K-97 | Ale | Dry | 11.5 g | Fermentis |