

Herkules

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **48**
- SRM **5.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **4 %**
- Size with trub loss **22.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **26.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16 liter(s)**
- Total mash volume **21.4 liter(s)**

Steps

- Temp **67 C**, Time **80 min**
- Temp **78 C**, Time **20 min**

Mash step by step

- Heat up **16 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **80 min** at **67C**
- Keep mash **20 min** at **78C**
- Sparge using **15.9 liter(s)** of **76C** water or to achieve **26.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 2 kg (37.5%) | 85 % | 7 |
| Grain | Viking Pilsner malt | 1 kg (18.7%) | 82 % | 4 |
| Grain | Weyermann - Munich Malt | 1 kg (18.7%) | 82 % | 14 |
| Grain | Platki owsiane | 0.34 kg (6.4%) | 85 % | 3 |
| Grain | Weyermann - Dark Wheat Malt | 1 kg (18.7%) | 85 % | 17 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|--------|------------|
| Boil | Herkules | 20 g | 40 min | 16.3 % |
| Aroma (end of boil) | Citra | 20 g | 5 min | 13.3 % |
| Whirlpool | Bravo | 30 g | 20 min | 15.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| safale T-58 | Ale | Slant | 100 ml | --- |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-----------|--------|---------|--------|
| Fining | protafloc | 1 g | Boil | 15 min |