

Haarlem

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **34**
- SRM **3.9**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **75 C**, Time **10 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **75C**
- Sparge using **15.5 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|-------------|-------|-----|
| Grain | Strzegom Pilzniejszy | 6 kg (100%) | 80 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|---------|--------|----------|------------|
| Boil | Chinook | 20 g | 40 min | 11.8 % |
| Boil | Chinook | 20 g | 20 min | 11.8 % |
| Boil | Citra | 10 g | 0 min | 12.8 % |
| Boil | Galaxy | 10 g | 0 min | 13.6 % |
| Whirlpool | Citra | 20 g | --- | 12.8 % |
| Whirlpool | Galaxy | 20 g | --- | 13.6 % |
| Dry Hop | Citra | 100 g | 3 day(s) | 12 % |
| Dry Hop | Mosaic | 100 g | 3 day(s) | 10 % |
| Dry Hop | Galaxy | 100 g | 3 day(s) | 15 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 23 g | Fermentis |