

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 Pilzneński	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