

# Nagły atak chmielu

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **28**
- SRM **7.5**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **2.85 liter(s) / kg**
- Mash size **10 liter(s)**
- Total mash volume **13.5 liter(s)**

## Steps

- Temp **70 C**, Time **30 min**

## Mash step by step

- Heat up **10 liter(s)** of strike water to **78.8C**
- Add grains
- Keep mash **30 min** at **70C**
- Sparge using **6.2 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.9 kg (82.9%)	80 %	5
Grain	Biscuit Malt	0.3 kg (8.6%)	79 %	45
Grain	Munich Malt	0.3 kg (8.6%)	80 %	18

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Zythos	10 g	60 min	9.2 %
Aroma (end of boil)	Zythos	5 g	10 min	9.2 %
Aroma (end of boil)	Enigma (AUS)	5 g	10 min	17 %
Whirlpool	Falconer's Flight	10 g	0 min	10.3 %
Whirlpool	Enigma (AUS)	5 g	0 min	17 %
Whirlpool	Zythos	10 g	0 min	9.2 %
Dry Hop	Falconer's Flight	10 g	3 day(s)	10.3 %
Dry Hop	Zythos	20 g	3 day(s)	9.2 %
Dry Hop	Enigma (AUS)	10 g	3 day(s)	17 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	6 g	Fermentis