

# Niemieckie IPA

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **21**
- SRM **4.2**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **23.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **19.2 liter(s)**

## Steps

- Temp **67 C**, Time **45 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **14.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **45 min** at **67C**
- Keep mash **1 min** at **78C**
- Sparge using **13.8 liter(s)** of **76C** water or to achieve **23.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.5 kg (93.8%)	80 %	5
Grain	Weyermann - Carapils	0.3 kg (6.3%)	78 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fantasia	30 g	60 min	4.3 %
Boil	Mittelfruh	20 g	10 min	3 %
Boil	Fantasia	10 g	10 min	4.3 %
Boil	Mittelfruh	10 g	1 min	3 %
Boil	Hallertau Blanc	10 g	1 min	11 %
Boil	Fantasia	10 g	1 min	4.3 %
Dry Hop	Hallertau Blanc	20 g	4 day(s)	11 %
Dry Hop	Fantasia	10 g	4 day(s)	4.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

## Notes

- Ferm. burz. 7 dni w temp. 19-21 C.  
Ferm. cicha 14 dni w tempo. 19-21 C.  
Refermentacja 14 dni w temp. 19-21 C.  
Gotowe po 7-14 dniach w temp. <15 C.  
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