

# niemiecka IPA

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **49**
- SRM **4**
- 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 **65 min**
- Evaporation rate **10 %/h**
- Boil size **25.5 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 **60 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **14.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **76C**
- Sparge using **15.9 liter(s)** of **76C** water or to achieve **25.5 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    | TnT               | 30 g   | 60 min   | 12.2 %     |
| Boil    | Lublin (Lubelski) | 20 g   | 10 min   | 4 %        |
| Boil    | TnT               | 10 g   | 10 min   | 12.2 %     |
| Boil    | TnT               | 10 g   | 0 min    | 12.2 %     |
| Boil    | Lublin (Lubelski) | 10 g   | 0 min    | 4 %        |
| Boil    | hersbrucker Blanc | 10 g   | 0 min    | 9.8 %      |
| Dry Hop | hersbrucker Blanc | 20 g   | 5 day(s) | 9.8 %      |
| Dry Hop | TnT               | 10 g   | 5 day(s) | 12.2 %     |

## Yeasts

| Name         | Type | Form  | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale  | Slant | 100 ml | Fermentis  |