

# IPA

- Gravity **17.1 BLG**
- ABV ---
- IBU **62**
- SRM **5.5**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **19.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.4 liter(s)**
- Boil time **70 min**
- Evaporation rate **5 %/h**
- Boil size **24.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.4 liter(s)**
- Total mash volume **25.8 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **19.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **11.9 liter(s)** of **76C** water or to achieve **24.8 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount          | Yield | EBC |
|-------|----------------------|-----------------|-------|-----|
| Grain | Viking Pale Ale malt | 4 kg (62%)      | 80 %  | 5   |
| Grain | Weyermann - Carapils | 0.5 kg (7.8%)   | 78 %  | 4   |
| Grain | Weyermann - Carared  | 0.2 kg (3.1%)   | 75 %  | 45  |
| Grain | Pilzneński           | 1.75 kg (27.1%) | 81 %  | 3   |

## Hops

| Use for             | Name                   | Amount | Time     | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil                | Columbus/Tomahawk/Zeus | 30 g   | 60 min   | 15.5 %     |
| Boil                | Mosaic                 | 10 g   | 15 min   | 10 %       |
| Boil                | Mosaic                 | 20 g   | 10 min   | 12 %       |
| Aroma (end of boil) | Mosaic                 | 15 g   | 5 min    | 10 %       |
| Whirlpool           | Mosaic                 | 15 g   | 0 min    | 10 %       |
| Dry Hop             | Mosaic                 | 30 g   | 4 day(s) | 12 %       |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|              |     |     |        |           |
|--------------|-----|-----|--------|-----------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |
|--------------|-----|-----|--------|-----------|

## Notes

- Warka uwarzona dnia 11,02,2017, do wystadzenia użyłem 17 l wody, odparowało 5l. Drożdże zadane w 21°C, po półgodzinie zjechałem do 13\*.  
*Feb 11, 2017, 9:53 PM*