

# IPA KOLEJNA PROBA

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- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **45**
- SRM **4.4**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **33 liter(s)**
- Trub loss **10 %**
- Size with trub loss **39.6 liter(s)**
- Boil time **90 min**
- Evaporation rate **15 %/h**
- Boil size **52.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **36 liter(s)**
- Total mash volume **48 liter(s)**

## Steps

- Temp **44 C**, Time **30 min**
- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **0 min**

## Mash step by step

- Heat up **36 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **30 min** at **44C**
- Keep mash **40 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **28.6 liter(s)** of **76C** water or to achieve **52.6 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount        | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Pilzneński           | 4 kg (33.3%)  | 81 %  | 4   |
| Grain | Pszeniczny           | 5 kg (41.7%)  | 85 %  | 4   |
| Grain | Płatki pszeniczne    | 0.5 kg (4.2%) | 85 %  | 3   |
| Grain | Płatki owsiane       | 0.5 kg (4.2%) | 85 %  | 3   |
| Grain | Viking Pale Ale malt | 2 kg (16.7%)  | 80 %  | 5   |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Magnum  | 40 g   | 80 min | 14 %       |
| Boil    | Citra   | 30 g   | 5 min  | 12.5 %     |
| Boil    | Galaxy  | 30 g   | 5 min  | 15 %       |
| Boil    | Equanot | 30 g   | 5 min  | 14.9 %     |
| Boil    | Magnum  | 20 g   | 5 min  | 12 %       |