

# Murzyńska Pipa

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- Gravity **15 BLG**
- ABV ---
- IBU **84**
- SRM **37.6**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **24.6 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **17.5 liter(s)** of strike water to **72.8C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **21.2 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

| Type  | Name                | Amount         | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | Pilzneński          | 6 kg (82%)     | 81 %  | 4   |
| Grain | Strzegom Karmel 150 | 0.12 kg (1.6%) | 75 %  | 150 |
| Grain | Carafa II           | 0.6 kg (8.2%)  | 70 %  | 812 |
| Grain | Biscuit Malt        | 0.3 kg (4.1%)  | 79 %  | 45  |
| Sugar | Brown Sugar, Dark   | 0.3 kg (4.1%)  | 100 % | 99  |

## Hops

| Use for             | Name                   | Amount | Time     | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil                | Columbus/Tomahawk/Zeus | 35 g   | 60 min   | 15.5 %     |
| Boil                | Columbus/Tomahawk/Zeus | 10 g   | 45 min   | 15.5 %     |
| Boil                | Simcoe                 | 15 g   | 15 min   | 13 %       |
| Boil                | Chinook                | 15 g   | 15 min   | 13 %       |
| Aroma (end of boil) | Simcoe                 | 15 g   | 5 min    | 13 %       |
| Aroma (end of boil) | Chinook                | 15 g   | 5 min    | 13 %       |
| Dry Hop             | Simcoe                 | 20 g   | 6 day(s) | 13 %       |
| Dry Hop             | Chinook                | 20 g   | 6 day(s) | 13 %       |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-05 | Ale  | Dry  | 11 g   | Safale     |