

# Warka #11

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- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **22**
- SRM **4.5**
- Style **Specialty Beer**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10.2 liter(s)**
- Total mash volume **13.1 liter(s)**

## Steps

- Temp **50 C**, Time **10 min**
- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **25 min**

## Mash step by step

- Heat up **10.2 liter(s)** of strike water to **54.3C**
- Add grains
- Keep mash **10 min** at **50C**
- Keep mash **45 min** at **64C**
- Keep mash **25 min** at **72C**
- Sparge using **5.4 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

## Fermentables

| Type  | Name                     | Amount         | Yield | EBC |
|-------|--------------------------|----------------|-------|-----|
| Grain | Słód pszeniczny Bestmalz | 2.2 kg (75.9%) | 82 %  | 5   |
| Grain | Pilznieński              | 0.7 kg (24.1%) | 81 %  | 4   |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Marynka | 10 g   | 60 min | 10 %       |

## Yeasts

| Name       | Type | Form | Amount | Laboratory |
|------------|------|------|--------|------------|
| safe us-05 | Ale  | Dry  | 11.5 g | ---        |

## Extras

| Type  | Name      | Amount | Use for | Time  |
|-------|-----------|--------|---------|-------|
| Spice | przyprawy | 5 g    | Boil    | 5 min |