

# Świerkowe

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **27**
- SRM **4.7**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **26.9 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.1 liter(s)**
- Total mash volume **28.4 liter(s)**

## Steps

- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **20 min**

## Mash step by step

- Heat up **22.1 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **20 min** at **72C**
- Sparge using **11.1 liter(s)** of **76C** water or to achieve **26.9 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount         | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Pilzneński                  | 4 kg (63.5%)   | 81 %  | 4   |
| Grain | Pszeniczny                  | 1.5 kg (23.8%) | 85 %  | 4   |
| Grain | Monachijski                 | 0.5 kg (7.9%)  | 80 %  | 16  |
| Grain | Weyermann - Acidulated Malt | 0.3 kg (4.8%)  | 80 %  | 6   |

## Hops

| Use for   | Name  | Amount | Time   | Alpha acid |
|-----------|-------|--------|--------|------------|
| Boil      | lunga | 25 g   | 50 min | 11 %       |
| Whirlpool | Citra | 30 g   | 1 min  | 12 %       |

## Extras

| Type | Name         | Amount | Use for | Time   |
|------|--------------|--------|---------|--------|
| Herb | pepy świerku | 200 g  | Boil    | 30 min |
| Herb | pepy świerku | 100 g  | Boil    | 0 min  |