

# Resztki

- Gravity **12.1 BLG**
- ABV ---
- IBU **53**
- SRM **6.6**

## Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **42 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **50.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **31.5 liter(s)**
- Total mash volume **40.5 liter(s)**

## Steps

- Temp **61 C**, Time **10 min**
- Temp **71 C**, Time **40 min**
- Temp **75 C**, Time **10 min**

## Mash step by step

- Heat up **31.5 liter(s)** of strike water to **66.9C**
- Add grains
- Keep mash **10 min** at **61C**
- Keep mash **40 min** at **71C**
- Keep mash **10 min** at **75C**
- Sparge using **28.1 liter(s)** of **76C** water or to achieve **50.6 liter(s)** of wort

## Fermentables

| Type  | Name                | Amount       | Yield | EBC |
|-------|---------------------|--------------|-------|-----|
| Grain | Strzegom Pilzneński | 3 kg (33.3%) | 80 %  | 4   |
| Grain | Strzegom Wiedeński  | 6 kg (66.7%) | 79 %  | 10  |

## Hops

| Use for             | Name           | Amount | Time   | Alpha acid |
|---------------------|----------------|--------|--------|------------|
| Boil                | magnum         | 7.2 g  | 90 min | 10 %       |
| Boil                | marynka        | 20 g   | 90 min | 9.4 %      |
| Boil                | norther brewer | 41 g   | 90 min | 7.5 %      |
| Boil                | lubelski       | 62 g   | 45 min | 4.3 %      |
| Aroma (end of boil) | lubelski       | 26 g   | 5 min  | 4.3 %      |

## Yeasts

| Name  | Type | Form  | Amount | Laboratory |
|-------|------|-------|--------|------------|
| us-05 | Ale  | Slant | 100 ml | ---        |