# Wspomnienie lata

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- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **17**
- SRM **4.1**
- Style **Witbier**

## Batch size

- Expected quantity of finished beer **50 liter(s)**
- Trub loss **5 %**
- Size with trub loss **52.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **63.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **44.8 liter(s)**
- Total mash volume **57.6 liter(s)**

## Steps

- Temp **52 C**, Time **50 min**
- Temp **68 C**, Time **90 min**
- Temp **78 C**, Time **15 min**

## Mash step by step

- Heat up **44.8 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **50 min** at **52C**
- Keep mash **90 min** at **68C**
- Keep mash **15 min** at **78C**
- Sparge using **31.3 liter(s)** of **76C** water or to achieve **63.3 liter(s)** of wort

## Fermentables

| Type | Name | Amount | Yield | EBC |
|---|---|---|---|---|
| Grain | Strzegom Pilzneński | 5 kg *(39.1%)* | 80 % | 4 |
| Grain | Pszenica niesłodowana | 4 kg *(31.3%)* | 75 % | 3 |
| Grain | Oats, Flaked | 1.6 kg *(12.5%)* | 80 % | 2 |
| Grain | Pszeniczny | 1 kg *(7.8%)* | 85 % | 4 |
| Grain | Acid Malt | 0.2 kg *(1.6%)* | 58.7 % | 6 |
| Grain | Simpsons - Golden Naked Oats | 1 kg *(7.8%)* | 73 % | 20 |
| Owies zmielony w młynku dla większej ilości łuski | | | | |

## Hops

| Use for | Name | Amount | Time | Alpha acid |
|---|---|---|---|---|
| Boil | Herkules | 20 g | 60 min | 17 % |
| Boil | Saaz (Czech Republic) | 20 g | 15 min | 4.5 % |
| Boil | Puławski | 10 g | 5 min | 4.3 % |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|---|---|---|---|---|
| Safale K-97 | Ale | Dry | 11.5 g | Fermentis |

## Extras

| Type | Name | Amount | Use for | Time |
|---|---|---|---|---|
| Spice | Kolendra | 20 g | Boil | 5 min |
| Flavor | Curacao | 20 g | Boil | 5 min |
| Spice | Kolendra | 10 g | Boil | 0 min |
| Flavor | Curacao | 10 g | Boil | 0 min |
| Herb | Miodokrzew | 20 g | Bottling | 0 min |
| Herb | Mirt cytrynowy | 30 g | Bottling | 0 min |
| Flavor | Trawa cytrynowa | 10 g | Bottling | 0 min |
| Flavor | Cytryna sok 4 | 100 g | Bottling | 0 min |
| Flavor | Pomarańcza sok 4 | 300 g | Bottling | 0 min |
| Spice | Kwiat pomarańczy | 10 g | Bottling | 0 min |
| Spice | Skórka pomarańczowa suszona | 5 g | Boil | 5 min |
| Spice | Skórka cytrynowa suszona | 5 g | Boil | 5 min |
| Spice | Skórka pomarańczowa suszona | 5 g | Boil | 0 min |
| Spice | Skórka cytrynowa suszona | 5 g | Boil | 0 min |

## Notes

- Dodatki do butelkowania będą zaparzone i dodane w postaci herbatki. Surowce niesłodowane poddane kleikowaniu.
  *Apr 8, 2022, 11:40 AM*