

szymanowska gorycz

- Gravity **14.3 BLG**
- ABV ---
- IBU **63**
- SRM **10.8**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **39.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **32 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **24 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **23.7 liter(s)** of **76C** water or to achieve **39.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|---------------|-------|-----|
| Grain | Briess - Pale Ale Malt | 3 kg (37.5%) | 80 % | 7 |
| Grain | Strzegom Wiedeński | 3 kg (37.5%) | 79 % | 10 |
| Grain | Karmelowy Czerwony | 0.5 kg (6.3%) | 75 % | 59 |
| Grain | Strzegom Karmel 30 | 0.5 kg (6.3%) | 75 % | 30 |
| Grain | Monachijski | 1 kg (12.5%) | 80 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | Marynka | 60 g | 60 min | 10 % |
| Aroma (end of boil) | Marynka | 30 g | 30 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale | Slant | 300 ml | Safale |