

Marcowo-Listopadowe

- Gravity **12.9 BLG**
- ABV ---
- IBU **27**
- SRM **10.6**
- Style **Oktoberfest/Märzen**

Batch size

- Expected quantity of finished beer **21.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.6 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **27.6 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **18.7 liter(s)**
- Total mash volume **24.2 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **63 C**, Time **30 min**
- Temp **73 C**, Time **45 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **18.7 liter(s)** of strike water to **56.7C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **63C**
- Keep mash **45 min** at **73C**
- Keep mash **10 min** at **78C**
- Sparge using **14.4 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|--------|-----|
| Grain | Strzegom Wiedeński | 3 kg (54.5%) | 79 % | 10 |
| Grain | Strzegom Monachijski typ II | 1.3 kg (23.6%) | 79 % | 22 |
| Grain | Strzegom Pilzneński | 1 kg (18.2%) | 80 % | 4 |
| Grain | Strzegom Karmel 150 | 0.1 kg (1.8%) | 75 % | 150 |
| Grain | BESTMALZ - Best Pilsen | 0.1 kg (1.8%) | 80.5 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Hersbrucker | 50 g | 65 min | 3 % |
| Boil | Lublin (Lubelski) | 25 g | 55 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------|-------|------|--------|------------------------------------|
| Saflager S-23 | Lager | Dry | 11.5 g | Fermentis Division of S.I.Lesaffre |