

# Marcowo-Listopadowe

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- Gravity **12.9 BLG**
- ABV ---
- IBU **25**
- SRM **10.4**
- Style **Oktoberfest/Märzen**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **28.3 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **24.4 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 **18.9 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 **15 liter(s)** of **76C** water or to achieve **28.3 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount         | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Strzegom Wiedeński          | 2 kg (36%)     | 79 %  | 10  |
| Grain | Strzegom Monachijski typ II | 2 kg (36%)     | 79 %  | 22  |
| Grain | Strzegom Pilzneński         | 1.5 kg (27%)   | 80 %  | 4   |
| Grain | Strzegom Karmel 150         | 0.05 kg (0.9%) | 75 %  | 150 |

## Hops

| Use for             | Name        | Amount | Time   | Alpha acid |
|---------------------|-------------|--------|--------|------------|
| Boil                | Hersbrucker | 60 g   | 60 min | 3 %        |
| Aroma (end of boil) | Hersbrucker | 20 g   | 30 min | 3 %        |

## Yeasts

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