

Marcowe 1

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **22**
- SRM **8.8**
- Style **Oktoberfest/Märzen**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **24.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.3 liter(s)**
- Total mash volume **20.4 liter(s)**

Steps

- Temp **54 C**, Time **10 min**
- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **15.3 liter(s)** of strike water to **59.7C**
- Add grains
- Keep mash **10 min** at **54C**
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **14.2 liter(s)** of **76C** water or to achieve **24.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński | 2.2 kg (43.1%) | 80 % | 4 |
| Grain | Strzegom Monachijski typ I | 2 kg (39.2%) | 79 % | 16 |
| Grain | Strzegom Wiedeński | 0.3 kg (5.9%) | 79 % | 10 |
| Grain | Karmelowy Jasny 30EBC | 0.3 kg (5.9%) | 75 % | 30 |
| Grain | Strzegom Karmel 150 | 0.2 kg (3.9%) | 75 % | 150 |
| Grain | Viking Melanoidynowy | 0.1 kg (2%) | 75 % | 60 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Marynka | 15 g | 60 min | 7.8 % |
| Boil | Sybilla | 25 g | 20 min | 5.7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|---------|-------|-------|--------|-----------|
| w-34/70 | Lager | Slant | 200 ml | fermentis |
|---------|-------|-------|--------|-----------|

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------|--------|---------|--------|
| Fining | wirflock | 1 g | Boil | 10 min |