

BA Marcowe 13 blg

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **23**
- SRM **5.7**
- 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 **65 min**
- Evaporation rate **15 %/h**
- Boil size **27.9 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

Steps

- Temp **53 C**, Time **15 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **2 min**

Mash step by step

- Heat up **15.9 liter(s)** of strike water to **58.5C**
- Add grains
- Keep mash **15 min** at **53C**
- Keep mash **30 min** at **62C**
- Keep mash **25 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **27.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Pilzneński | 3.2 kg (60.4%) | 81 % | 4 |
| Grain | Strzegom Monachijski typ I | 0.8 kg (15.1%) | 79 % | 16 |
| Grain | Weyermann - Carapils | 0.3 kg (5.7%) | 78 % | 4 |
| Grain | Caramunich® typ I | 0.2 kg (3.8%) | 73 % | 80 |
| Grain | Strzegom Pilzneński | 0.4 kg (7.5%) | 80 % | 4 |
| Grain | Płatki owsiane | 0.4 kg (7.5%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil | Mount Hood | 30 g | 60 min | 5.5 % |
| Boil | Relax | 10 g | 60 min | 3.2 % |
| Aroma (end of boil) | Relax | 20 g | 15 min | 3.2 % |

Yeasts

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

| | | | | |
|------------------|-------|-----|--------|-----------|
| Saflager W 34/70 | Lager | Dry | 11.5 g | Fermentis |
|------------------|-------|-----|--------|-----------|

Extras

| Type | Name | Amount | Use for | Time |
|--------|-----------|--------|---------|--------|
| Fining | whirlfloc | 1.25 g | Boil | 10 min |