

Dusza Janusza.

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **23**
- SRM **8.8**
- Style **Oktoberfest/Märzen**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **55 C**, Time **20 min**
- Temp **62 C**, Time **30 min**
- Temp **73 C**, Time **45 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **20 min** at **55C**
- Keep mash **30 min** at **62C**
- Keep mash **45 min** at **73C**
- Keep mash **10 min** at **77C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------------|--------------|-------|-------|
| Grain | Weyermann - Bohemian Pilsner Malt | 2.5 kg (50%) | 81 % | 3.3 |
| Grain | Weyermann - Munich Malt type 2 | 2 kg (40%) | 77 % | 16.7 |
| Grain | Caramunich® typ I | 0.5 kg (10%) | 73 % | 100.5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Oktawia | 15 g | 60 min | 7.8 % |
| Boil | Oktawia | 20 g | 20 min | 7.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------|-------|------|--------|------------|
| Saflager W 34/70 | Lager | Dry | 22 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

| | | | | |
|--------|----------------|-----|------|--------|
| Fining | Mech irlandzki | 8 g | Boil | 10 min |
|--------|----------------|-----|------|--------|