

Na ralszu

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **25**
- SRM **13.5**
- Style **Classic Rauchbier**

Batch size

- Expected quantity of finished beer **28.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **29.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **36.1 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **23.6 liter(s)**
- Total mash volume **30.3 liter(s)**

Steps

- Temp **66 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **23.6 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **30 min** at **66C**
- Keep mash **30 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **19.2 liter(s)** of **76C** water or to achieve **36.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Weyermann - Grodziski | 5 kg (74.3%) | 80 % | 4 |
| Grain | Caramunich® typ I | 0.38 kg (5.6%) | 73 % | 80 |
| Grain | Monachijski | 1.2 kg (17.8%) | 80 % | 16 |
| Grain | Strzegom Czekoladowy ciemny | 0.15 kg (2.2%) | 68 % | 1200 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Lublin (Lubelski) | 60 g | 60 min | 4 % |
| Boil | Lublin (Lubelski) | 40 g | 15 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|-------|--------|------------|
| Danstar - Nottingham | Ale | Slant | 300 ml | Danstar |

Extras

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

| | | | | |
|--------|----------------|-----|------|--------|
| Fining | Mech irlandzki | 5 g | Boil | 10 min |
|--------|----------------|-----|------|--------|