

Rauch Doppelbock

- Gravity **19.6 BLG**
- ABV **8.6 %**
- IBU **21**
- SRM **17.9**
- Style **Doppelbock**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **66 C**, Time **15 min**
- Temp **72 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **15 min** at **66C**
- Keep mash **60 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **3.2 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Słód Wędzony Steinbach | 3 kg (50%) | 80 % | 5 |
| Grain | Strzegom Monachijski typ II | 2.8 kg (46.7%) | 79 % | 22 |
| Grain | Caraaroma | 0.2 kg (3.3%) | 78 % | 400 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------|--------|--------|------------|
| Boil | Marynka PH 2019 | 20 g | 40 min | 8.7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------|-------|-------|--------|------------|
| Saflager W 34/70 | Lager | Slant | 200 ml | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|----------------|--------|---------|--------|
| Water Agent | chlerek wapnia | 5 g | Mash | 60 min |
| Fining | whirlflock | 1 g | Boil | 5 min |