

żytnie

- Gravity **17 BLG**
- ABV ---
- IBU **21**
- SRM **19.6**
- Style **Roggenbier**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss --- %
- Size with trub loss --- **liter(s)**
- Boil time **90 min**
- Evaporation rate --- %/h
- Boil size --- **liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio --- **liter(s) / kg**
- Mash size **25 liter(s)**
- Total mash volume **30.5 liter(s)**

Steps

- Temp **62 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **25 liter(s)** of strike water to **66.6C**
- Add grains
- Keep mash **50 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **-19.5 liter(s)** of **76C** water

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|--------|-------|-----|
| Grain | Monachijski | 3 kg | 80 % | 20 |
| Grain | Żytni | 2 kg | 85 % | 9 |
| Grain | Strzegom Karmel 150 | 0.5 kg | 75 % | 180 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------|--------|--------|------------|
| Boil | lunga | 13 g | 90 min | 10 % |
| Aroma (end of boil) | lunga | 10 g | 30 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------|-------|------|--------|------------|
| Safbrew WB-06 | Wheat | Dry | 11 g | Safbrew |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|--------|
| Fining | Mech Irlandzki | 4 g | Boil | 10 min |