

# Rogen #1

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **16**
- SRM **5.7**
- Style **Roggenbier**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **20.6 liter(s)**
- Total mash volume **26.9 liter(s)**

## Steps

- Temp **44 C**, Time **20 min**
- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **20.6 liter(s)** of strike water to **47.6C**
- Add grains
- Keep mash **20 min** at **44C**
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **11 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                    | Amount       | Yield | EBC |
|-------|-------------------------|--------------|-------|-----|
| Grain | Żytni                   | 2 kg (32%)   | 85 %  | 8   |
| Grain | Pszeniczny              | 1 kg (16%)   | 85 %  | 4   |
| Grain | Weyermann - Vienna Malt | 2 kg (32%)   | 81 %  | 8   |
| Grain | Weyermann - Carapils    | 0.25 kg (4%) | 78 %  | 4   |
| Grain | Słód owsiany Fawcett    | 1 kg (16%)   | 61 %  | 5   |

## Hops

| Use for | Name      | Amount | Time   | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil    | Magnum    | 10 g   | 60 min | 12 %       |
| Boil    | Hallertau | 20 g   | 10 min | 4.5 %      |

## Yeasts

| Name                   | Type  | Form   | Amount  | Laboratory       |
|------------------------|-------|--------|---------|------------------|
| FM41 Gwoździe i Banany | Wheat | Liquid | 1000 ml | Fermentum Mobile |

## Extras

| Type  | Name  | Amount | Use for | Time   |
|-------|-------|--------|---------|--------|
| Other | łuska | 500 g  | Mash    | 60 min |

## Notes

- fermentacja w temp. max 18C  
*Oct 6, 2019, 8:47 AM*