

# W007-Polskie Żyto

- Gravity **13.1 BLG**
- ABV **5.6 %**
- IBU **22.1**
- SRM **32.8**
- Style **Roggenbier**

## Batch size

- Expected quantity of finished beer **20.5 liter(s)**
- Trub loss **0 %**
- Size with trub loss **20.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.88 liter(s)**

## Mash information

- Mash efficiency **67 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.05 liter(s)**
- Total mash volume **21.4 liter(s)**

## Steps

- Temp **44 C**, Time **20 min**
- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **79 C**, Time **1 min**

## Mash step by step

- Heat up **16.05 liter(s)** of strike water to **48C**
- 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 **79C**
- Sparge using **13.2 liter(s)** of **76C** water or to achieve **23.88 liter(s)** of wort

## Fermentables

| Type  | Name            | Amount  | Yield | EBC |
|-------|-----------------|---------|-------|-----|
| Grain | Żytni           | 3.2 kg  | 80 %  | 23  |
| Grain | Munich Malt     | 1 kg    | 80 %  | 39  |
| Grain | Słód Pilzneński | 0.75 kg | 80 %  | 9   |
| Grain | Karmelowy 300   | 0.4 kg  | 75 %  | 799 |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Sybilla | 25 g   | 60 min | 5.5 %      |
| Boil    | Sybilla | 15 g   | 15 min | 5.5 %      |

## Yeasts

| Name              | Type | Form   | Amount | Laboratory       |
|-------------------|------|--------|--------|------------------|
| Gwoździe i Banany | Ale  | Liquid | ml     | Fermentum Mobile |

## Extras

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

|        |                 |        |      |       |
|--------|-----------------|--------|------|-------|
| Fining | Łuska orkiszowa | 0.35 g | Mash | 0 min |
|--------|-----------------|--------|------|-------|