

Xo

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **24**
- SRM **7.3**
- Style **American Wheat or Rye Beer**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **10 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **34.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.52 liter(s) / kg**
- Mash size **13.9 liter(s)**
- Total mash volume **19.4 liter(s)**

Steps

- Temp **48 C**, Time **0 min**
- Temp **65 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **13.9 liter(s)** of strike water to **53.5C**
- Add grains
- Keep mash **0 min** at **48C**
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **76C**
- Sparge using **26.1 liter(s)** of **76C** water or to achieve **34.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------------|---------------|-------|-----|
| Grain | Strzegom Pilzneński | 3 kg (54.5%) | 80 % | 4 |
| Grain | Strzegom Pszeniczny | 2 kg (36.4%) | 81 % | 6 |
| Grain | Karmelowy Pszeniczny Strzegom | 0.5 kg (9.1%) | 79 % | 130 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil | Jarrylo | 10 g | 60 min | 15 % |
| Boil | Citra | 10 g | 60 min | 12 % |
| Aroma (end of boil) | Citra | 20 g | 0 min | 12 % |
| Aroma (end of boil) | Jarrylo | 20 g | 0 min | 15 % |
| Dry Hop | Citra | 20 g | 7 day(s) | 12 % |
| Dry Hop | Jarrylo | 20 g | 7 day(s) | 15 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------|-------|------|--------|------------|
| Gozdawa Fruit Blanche | Wheat | Dry | 10 g | Gozdawa |