

## bit

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **44**
- SRM **10.2**
- Style **Special/Best/Premium Bitter**

### Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **8.5 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **19 liter(s)**

### Steps

- Temp **66 C**, Time **90 min**

### Mash step by step

- Heat up **17 liter(s)** of strike water to **68.7C**
- Add grains
- Keep mash **90 min** at **66C**
- Sparge using **1.4 liter(s)** of **76C** water or to achieve **16.4 liter(s)** of wort

### Fermentables

| Type    | Name                          | Amount       | Yield | EBC |
|---------|-------------------------------|--------------|-------|-----|
| Grain   | Strzegom Pale Ale             | 1 kg (40%)   | 79 %  | 6   |
| Grain   | Strzegom Wiedeński            | 0.5 kg (20%) | 79 %  | 10  |
| Grain   | Karmelowy Pszeniczny Strzegom | 0.5 kg (20%) | 79 %  | 130 |
| Adjunct | kukurydza                     | 0.5 kg (20%) | --- % | --- |

### Hops

| Use for             | Name            | Amount | Time   | Alpha acid |
|---------------------|-----------------|--------|--------|------------|
| Boil                | Northern Brewer | 25 g   | 60 min | 8 %        |
| Aroma (end of boil) | Northern Brewer | 25 g   | 5 min  | 8 %        |

### Yeasts

| Name        | Type | Form    | Amount | Laboratory |
|-------------|------|---------|--------|------------|
| Safale S-04 | Ale  | Culture | 80 g   | Safale     |

### Extras

| Type    | Name           | Amount | Use for | Time   |
|---------|----------------|--------|---------|--------|
| Finning | mech irlandzki | 3 g    | Boil    | 55 min |