

IPA 03.12.19

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **66**
- SRM **4.3**

Batch size

- Expected quantity of finished beer **45 liter(s)**
- Trub loss **5 %**
- Size with trub loss **49.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **59.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **45.1 liter(s)**
- Total mash volume **57.3 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------|---------------|-------|-----|
| Grain | Strzegom Pilzneński | 9 kg (73.8%) | 80 % | 4 |
| Grain | Viking Pale Ale malt | 2 kg (16.4%) | 80 % | 5 |
| Grain | Pszeniczny | 0.8 kg (6.6%) | 85 % | 4 |
| Grain | Monachijski Ciemny Steinbach | 0.4 kg (3.3%) | 100 % | 30 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 50 g | 60 min | 15.5 % |
| Boil | Magnat | 50 g | 60 min | 11.2 % |
| Aroma (end of boil) | Cascade PL | 50 g | 5 min | 5.2 % |
| Whirlpool | Cascade PL | 50 g | 10 min | 5.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|--------|
| Fining | mech irlandzki | 15 g | Boil | 15 min |