

# Grand Champion 2013 (prawie)

- Gravity **18.4 BLG**
- ABV ---
- IBU **88**
- SRM **8.5**
- Style **Imperial IPA**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **10 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **80 min**
- Evaporation rate **15 %/h**
- Boil size **33 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **25.4 liter(s)**
- Total mash volume **32.6 liter(s)**

## Steps

- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **10 min**
- Temp **77 C**, Time **4 min**

## Mash step by step

- Heat up **25.4 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **4 min** at **77C**
- Sparge using **14.9 liter(s)** of **76C** water or to achieve **33 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount         | Yield | EBC  |
|-------|----------------------------|----------------|-------|------|
| Grain | Strzegom Pilzneński        | 5.4 kg (69.2%) | 80 %  | 3.85 |
| Grain | Strzegom Monachijski typ I | 0.8 kg (10.3%) | 79 %  | 16   |
| Grain | Weyermann pszeniczny jasny | 0.8 kg (10.3%) | 80 %  | 6    |
| Grain | Weyermann Caramunich II    | 0.25 kg (3.2%) | 73 %  | 120  |
| Sugar | cukier biały               | 0.55 kg (7.1%) | 100 % | 1    |

## Hops

| Use for | Name                   | Amount | Time   | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil    | Magnum                 | 30 g   | 60 min | 11.2 %     |
| Boil    | Columbus/Tomahawk/Zeus | 40 g   | 30 min | 12.5 %     |
| Boil    | Simcoe                 | 25 g   | 20 min | 11.4 %     |
| Boil    | Citra                  | 25 g   | 15 min | 13.5 %     |
| Boil    | Centennial             | 25 g   | 10 min | 10.2 %     |
| Boil    | Amarillo               | 25 g   | 5 min  | 8.9 %      |
| Boil    | Amarillo               | 25 g   | 2 min  | 8.9 %      |

|         |                        |      |          |        |
|---------|------------------------|------|----------|--------|
| Boil    | Simcoe                 | 25 g | 0 min    | 11.4 % |
| Dry Hop | Columbus/Tomahawk/Zeus | 25 g | 4 day(s) | 12.5 % |
| Dry Hop | Citra                  | 25 g | 4 day(s) | 13.5 % |
| Dry Hop | Amarillo               | 25 g | 4 day(s) | 8.9 %  |
| Dry Hop | Simcoe                 | 25 g | 4 day(s) | 11.4 % |

### Yeasts

| Name         | Type | Form  | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale  | Slant | 250 ml | Fermentis  |

### Extras

| Type        | Name           | Amount | Use for | Time   |
|-------------|----------------|--------|---------|--------|
| Fining      | Mech irlandzki | 5 g    | Boil    | 5 min  |
| Water Agent | Chlorek wapnia | 10 g   | Boil    | 80 min |