

Piątek 13-go

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **67**
- SRM **5.6**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **2 %**
- Size with trub loss **42.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **49.3 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **36 liter(s)**
- Total mash volume **48 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **76 C**, Time **10 min**
- Temp **100 C**, Time **75 min**

Mash step by step

- Heat up **36 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **76C**
- Keep mash **75 min** at **100C**
- Sparge using **25.3 liter(s)** of **76C** water or to achieve **49.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|-----------------|-------|-----|
| Grain | Pale Malt (2 Row) US | 10.4 kg (86.7%) | 79 % | 4 |
| Grain | Weyermann - Carapils | 0.8 kg (6.7%) | 78 % | 4 |
| Grain | Weyermann - Carared | 0.8 kg (6.7%) | 75 % | 45 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil | Horizon | 80 g | 70 min | 12 % |
| Boil | Horizon | 40 g | 10 min | 12 % |
| Boil | Cascade | 40 g | 10 min | 6 % |
| Aroma (end of boil) | Cascade | 120 g | 0 min | 6 % |
| Aroma (end of boil) | Simcoe | 40 g | 0 min | 13.2 % |
| Dry Hop | Citra | 60 g | 7 day(s) | 12 % |
| Dry Hop | Amarillo | 60 g | 7 day(s) | 9.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|-------|-----|-----|------|-----|
| US-05 | Ale | Dry | 46 g | --- |
|-------|-----|-----|------|-----|