

Harpagan

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **81**
- SRM **3.6**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.8 liter(s)**

Steps

- Temp **67 C**, Time **40 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **12.6 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **40 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|---------------|-------|-----|
| Grain | Weyermann - Pilsner Malt | 4 kg (95.2%) | 81 % | 5 |
| Grain | Weyermann - Carapils | 0.2 kg (4.8%) | 78 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|----------|------------|
| Boil | Falconer's Flight | 20 g | 10 min | 10.5 % |
| Boil | Falconer's Flight | 60 g | 55 min | 10.5 % |
| Dry Hop | Falconer's Flight | 140 g | 3 day(s) | 10.5 % |

Yeasts

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

Extras

| Type | Name | Amount | Use for | Time |
|-------------|---------|--------|----------|------|
| Water Agent | Glukoza | 80 g | Bottling | --- |