

# Brudny Hary

- Gravity **20 BLG**
- ABV **8.8 %**
- IBU **71**
- SRM **6.1**
- Style **Imperial IPA**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **32.6 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **27 liter(s)**
- Total mash volume **36 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **45 min**

## Mash step by step

- Heat up **27 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **45 min** at **64C**
- Keep mash **45 min** at **72C**
- Sparge using **14.6 liter(s)** of **76C** water or to achieve **32.6 liter(s)** of wort

## Fermentables

| Type  | Name                | Amount       | Yield | EBC |
|-------|---------------------|--------------|-------|-----|
| Grain | Strzegom Pszeniczny | 4.5 kg (50%) | 81 %  | 6   |
| Grain | pale ale            | 4.5 kg (50%) | 80 %  | 7   |

## Hops

| Use for             | Name     | Amount | Time     | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil                | citra    | 55 g   | 60 min   | 16 %       |
| Aroma (end of boil) | Eureka!  | 55 g   | 5 min    | 18 %       |
| Dry Hop             | Citra    | 100 g  | 5 day(s) | 12 %       |
| Dry Hop             | Galaxy   | 60 g   | 5 day(s) | 15 %       |
| Dry Hop             | Palisade | 60 g   | 5 day(s) | 7.5 %      |

## Yeasts

| Name   | Type | Form  | Amount | Laboratory |
|--------|------|-------|--------|------------|
| us -05 | Ale  | Slant | 400 ml | ---        |

## Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

|             |      |      |      |     |
|-------------|------|------|------|-----|
| Water Agent | gips | 10 g | Mash | --- |
|-------------|------|------|------|-----|