

#VII WIPA z Gruszkami

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **70**
- SRM **4**
- Style **White IPA**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **70 min**
- Evaporation rate **2 %/h**
- Boil size **28.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **67 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **16.2 liter(s)** of **76C** water or to achieve **28.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|---------------|--------|-----|
| Grain | Strzegom Pale Ale | 3 kg (50%) | 79 % | 6 |
| Grain | Pilzneński | 1 kg (16.7%) | 80.5 % | 4 |
| Grain | Słód Pszeniczny Heidelberg | 1 kg (16.7%) | 82 % | 3 |
| Grain | Wheat, Flaked | 0.5 kg (8.3%) | 77 % | 4 |
| Grain | Rice, Flaked | 0.5 kg (8.3%) | 70 % | 2 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------------------|--------|--------|------------|
| Boil | Experimental P10/9 | 10 g | 60 min | 6.9 % |
| Boil | Calypso | 10 g | 60 min | 14.9 % |
| Boil | Jarrylo | 10 g | 60 min | 15 % |
| Boil | Experimental P10/9 | 5 g | 30 min | 6.9 % |
| Boil | Calypso | 5 g | 30 min | 14.9 % |
| Boil | Jarrylo | 5 g | 30 min | 15 % |
| Boil | Experimental P10/9 | 10 g | 15 min | 6.9 % |
| Boil | Calypso | 10 g | 15 min | 14.9 % |
| Boil | Jarrylo | 10 g | 15 min | 15 % |

| | | | | |
|---------------------|--------------------|------|----------|--------|
| Aroma (end of boil) | Experimental P10/9 | 10 g | 5 min | 6.9 % |
| Aroma (end of boil) | Calypso | 10 g | 5 min | 14.9 % |
| Aroma (end of boil) | Jarrylo | 10 g | 5 min | 15 % |
| Dry Hop | Experimental P10/9 | 15 g | 5 day(s) | 6.9 % |
| Dry Hop | Calypso | 15 g | 5 day(s) | 14.9 % |
| Dry Hop | Jarrylo | 15 g | 5 day(s) | 15 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------|------|--------|--------|------------------|
| FM11 Wichrowe Wzgórza | Ale | Liquid | 30 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-----------------|--------|-----------|-----------|
| Flavor | Gruszki | 150 g | Boil | 30 min |
| Flavor | Gruszki | 300 g | Boil | 20 min |
| Flavor | Gruszki | 400 g | Boil | 15 min |
| Flavor | Gruszki | 300 g | Boil | 10 min |
| Flavor | Gruszki | 640 g | Boil | 5 min |
| Flavor | Pulpa gruszkowa | 2700 g | Secondary | 20 day(s) |
| Flavor | Pulpa gruszkowa | 2400 g | Secondary | 10 day(s) |