# **PPR-DSL Cheatsheet**

### **Attributes**

```
Attribute "partialProduct": {
  description: "Specifies if the given product is a partial one",
  defaultValue: "false",
  type: "String"
}
```

### **Products**

```
// Abstract product definition
Product "Fork": {
   name: "Fork",
   isAbstract: true, // Keyword and value for abstract products
   partialProduct: "true" // Attribute for a partial product
}

// Concrete product definition
Product "Fork13": {
   name: "Fork13",
   partialProduct: "true" // Attribute for a partial product
   implements: [ "Fork" ], // Implements an abstract product
   excludes: [ "Fork25" ], // Excludes similar products of different type/variant
   requires: [ "Pipe" ], // Required other products to produce the product
   children: [ "Barrel" ], // Products that are part of the
}
```

#### Resources

```
// Abstract resource definition
Resource "Forklift": {
   name: "Forklift",
   isAbstract: true, // Keyword and value for abstract resource
}

// Concrete resource definition
Resource "Forklift_1": {
   name: "Forklift_1",
   implements: [ "Forklift" ], // Implements an abstract resource
   excludes: [ "Forklift2" ], // Excludes resources of different type/variant children: [ "Gipper" ], // Products that are part of the
}
```

#### **Processes**

```
// Abstract process definition
Process "LiftFork": {
  name: "LiftFork",
  isAbstract: true, // Keyword and value for abstract resource
  inputs: [ {productId: "Fork"}, {..} ], // Input products
  outputs: [ {OP1: {productId: "Fork"}}, {..} ], // Input outputs
  resources: [ { resourceId: "Forklift" }, {..} ] //
}
// Concrete process definition
Process "LiftFork_high": {
  name: "LiftFork high",
  implements: [ "LiftFork" ], // Implements an abstract process
  inputs: [ {productId: "Fork13"}, {..} ], // Input products
  outputs: [ {OP1: {productId: "Fork"}}, {..} ], // Input outputs
  resources: [ { resourceId: "Forklift" }, {..} ] //
}
```

## Constraints

```
Constraint "C1": {
  definition: "LiftFork_high, Forklift_1 → LiftFork_high implies Forklift_1"
  // Constraint with two concepts that can be concatenated with 'and' and 'or'
}
```