

Documentation PS API V50

1. Introduction

The PS-API is the way to communicate, automatically, with the PS database. Through so-called API calls product information can be retrieved. Product owners also can send product information.

If you want to use this service, send a request to renate@psinfoodservice.com containing the following information:

- name, email, company, address
- intended data use and functionality of the account (e.g. sending/updating data, retrieving data)

The PS-API Account has access to all public data and non-public data authorized to your personal PS-API account.

On the website, <https://webapi.psinfoodservice.com/v50/prod> you will find additional information, including:

- XML and hot product of a rich example product
- XSD, with all fields and structure
- examples in C # and PHP

The PS API can be called with so-called HTTP GET and POST requests.

2. Version management

We always try to be up-to-date to the needs of our users. Therefore, PS is constantly working to align our API to questions of the user. Adjustments are backwards compatible and will only contain additional functionality. So, you do not need to change anything unless you want to use the new functionality / fields. We will e-mail the API contacts to inform them of new features.

However, in some cases it is necessary to make structural changes. For example, a change in legislation. In case of structural changes, we will inform API contacts. The "old" version will remain (as complete as possible) available for six months, in order to make the necessary changes (if necessary). After that period, the old version expires.

3. PS XML structure

3.1. Envelope

Each PS XML message contains an envelope. This is the container in which all the information is available.

3.2. Header

The header contains additional information about the message. You can find information about the type of message (get, update or validate), but also information about the length, version and the number of products returned.

3.3. Body

The body contains the data content. Depending on the call, the information may vary. The following components may occur.

3.4. Master Data

This section contains all the (static) master data used in lists. For example, a list of unit of measure, allergens or countries. Translations and additional information are available. When an element in the product information is master data, it contains the id and standard definition / name. The rest of the information is available in the master data.

3.5. Products

This is the most common section and contains one or more products. Each product is divided into: product, commercial, logistics and product specification. Product, logistics and commercial are always present. The specification is available when it is approved by the manufacturer.

All active products that the user has access to, are sent with the API. However, there are dates concerning the validity of the product.

- **ValidFrom**
the date from which the product is available on the market. A product with a date in the future, will not be visible on the PS Foodbook
- **EndAvailabilityDate**
the date from which the product is no longer being sold
- **ValidTo**
the date until the product is being on the market, plus the expected expiration date. From that moment on the product will no longer be displayed on the PS Foodbook

ATTENTION

A product is identified by the smallest available unit (= base unit or CE). Information about trade units (TU/HE) and pallets are available inside this product. It may therefore happen that a GTIN number of HE is not immediately visible, but does exist in the product. When searched for the GTIN of an HE, the smallest unit (CE) is sent back.

3.6. Info Product Group List

Many products are divided into PS product groups. The full list of PS product groups can be obtained from the master data. This is a hierarchical list.

3.7. Brands

List of available brands, their owners (PS-ID, name and GLN) and, if applicable, logos.

3.8. Update Result

When a product is updated, the summary of results and possible errors can be found here.

3.9. Psidmatchlist

It is possible to execute a match result. In this section, the search criteria can be entered and results are sent back in the same structure. Match is done on EAN or article number.

4. Retrieve data

One of the main features of the PS API is to get product data. This can be done in different ways. First, the various options are explained, then a few scenarios or examples will be given.

4.1. Master Data (/ api / master / all)

A list of all PS master data. The list includes PS-ID, names, translations and possibly additional information such as additional codes and sequences.

4.2. Scenarios for retrieving data (based on Search and Match)

There is a separate document which describes in detail the best method to retrieve data with the PS-API. For more detail see: http://webapi.psinfoodservice.nl/v50/prod/Doc/PS-API%20Scenarios%20retrieve%20product%20info_EN.pdf

4.3. Retrieve only changed products

We recommend to cache products locally so that applications are not depending on the availability and speed of the PS-API. To do this, it is necessary to synchronize your products regularly. The PS-API has a simple solution. The Search has a filter parameter LastModifiedAfter. When this filter is applied, you will receive only products that have been changed after this date. This way you can incrementally update the locally stored products with the latest version.

TIP

Product information can best be synchronized outside office hours

4.4. Deleted product

In addition to updating, it is possible that products are no longer being available in the PS database. For example, if the product has been withdrawn from the market. The local version must also be marked as a product that no longer receives updates. Since the PS-API cannot send messages, this check should be carried out by yourself. Through the call /api/product/productidlist you will get a list of all PS-ID where you have access to. If local products are not in this list, you will no longer receive updates. Products that do not appear in this list must be removed in your own system.

4.5. Images

Within the XML there is also a link to images (pack shots, business photos and logos). For example: <https://permalink.psinfoodservice.com/prod/image/5659/AA9C89E4-5D86-4EAD-A3F0-F7DB0E1D840D?w=250&h=250>

The image can be downloaded using this route.

TIP

The standard size is 250 x 250 px. When you want a larger size, change the w and h to, for example, 1000 x 1000 px

5. Send data

Sending or update product information can be done using the PS-API, a computer to computer connection. Management systems within a company where all the source information regarding product specification already exists can send data to PS using the PS-API. The main advantage of this connection is maintaining information in one place. This prevents (human) errors and saves time and money.

5.1. Steps

To get product information automatically in the PS database, the following steps must be taken

- Read the following documentation
- Contact PS for a PS-API account in the pre-production environment

- Test and develop using the PS pre-production environment until the update process is successful. Products can be viewed in the Data Entry of pre-production
- PS evaluates some products in the pre-production environment
- Change the connection from pre-prod to production
- Products can be sent to the production environment

5.2. How does it work?

The connection is easy. PS has a PS-XML and an associated XSD. The XSD describes which fields are possible and obliged within the PS-XML. It is only possible to send one product at the time.

There are several things that need attention and where choices must be made. The important thing is that PS and the sending party “speak the same language”. If somewhere ‘gram’ is used as the unit of measure, PS should know that we mean ‘gram’. PS has "lists" (master data) such as countries, unit of measure, allergens, nutritional values etc containing masterid's. These ids should be used in the PS XML. Therefore, a mapping is needed. The master data can be downloaded using the PS-API.

For links to external systems, we offer the possibility to send a ThirdPartyId. This ID is a unique identifier such as the product number known by the sending party. Based on this identifier we can check whether the product already exists in the PS database or should be created. A ThirdPartyID may be a product number, but also an EAN number.

One of the most important things is that the Brand should be known in PS in advance. Brand is important for communication. So, when you send product information it should contain a valid Brand-ID.

The following information must be at least present in a new product:

- Brand (with a known PS-ID)
- Producer (it is determined based on your API account, and is therefore always present)
- PS-ID, GTIN or ThirdPartyId in the logistic
- Name in logistic
- Product Type (packagedproducttypeid) (CU = 1 TU = 2 Pallet = 4)

The XML must be validated to the XSD. It may happen that some fields have to have a value despite of not being used in the update process. For example, if references are used for master data then it may be that the corresponding name also should be given. If this is inconvenient, a fix value like ‘Masterdata’ will suffice.

5.3. Technical

The call to update is a simple Post to `api/product/updateraw` with the body fully filled with PS XML (including envelope / header / body).

The result is an update report with possible errors and whether the product has been modified.

Through adding the parameter `IncludeLogging = true` a comprehensive log can be returned. This can be used for debugging purposes.

5.4. Considerations

- Each product is sent separately in an XML message. Updating several products at once is not possible
- packagedproducttypeid in product information must be filled (CU = 1 TU = 2 Pallet = 4)
- PS-ID referring to master data must be present
- When using a ThirdPartyId, the sending party is responsible for its uniqueness.

- Products are updated based of PSID, ThirdPartyId or GTIN and user API account. You can only update your own products.
- If a GTIN is already present in PS, but has a different owner, the result will be an error. Please contact PS
- Products are updated as a whole, so components within specifications cannot be updated separately. So, when the specification is updated, then all allergens, ingredients, nutritional values, ... are being discarded and replaced with the new version.
- Ingredients are no master data. Completing an ID = 0 is sufficient
- Brands and producers should exist in the PS database.
- The user of the PS API account is automatically set as producer (regardless of what is entered).

5.5. XML validation

To validate whether the XML message is valid, run the Update method with an action type = "VALIDATE" in the header. The entire update process will be run through, but the product is not saved in the database. You do get a report back with comments and issues.

6. Overview calls

All calls can be found on <https://webapi.psinfoodservice.com/v50/prod/help>

7. FAQ

There is no specification available?

A product can contain a product specification, but it is not a requirement. The receiver should always check whether a specification is present.

Which allergens should be submitted?

PS prefers all the 38 allergens being delivered with a level of containment: Contains, May contain or Free From. Many users ask for this information. The 14 allergens required by law and the specific wheats and nuts should be submitted. The master defines which allergens are required by law.

Can I also collect information in JSON?

The response is in XML, JSON is not supported due to caching

I'm looking for an GTIN, but get back a different GTIN?

If you search for a GTIN/EAN of the Trade Unit (TU), the result shows the GTIN of the smallest unit (CU).

I'm looking for a product from my assortment, I see the product on the PS Foodbook, yet I get no results.

This can be caused by:

- You will get products based on an assortment list, and this product is not in the present assortment list.
 - Solution: get products using the Match procedure (see 4.6)
- You're a wholesaler and try to get a private label product from another wholesaler. This is not allowed.

Are all of PS products in the Foodbook? (<https://foodbook.psinfoodservice.com/prod>)

No, only products with a brand that is publicly visible. There are also products made specifically for a company (company-only products). These company-only products are not available in the Foodbook.

These products can only be retrieved by the manufacturer, the brand owner or through a subscription on the brand. This subscription can only be added by PS.

I have no GTIN. How can I collect data?

Data can also be requested based on the article number of a wholesaler in combination with the wholesale GLN or ID (see 4.6)

I try to update products, but get the message that I have no rights.

This can have three possible causes.

- You try to update a product but you are not the producer or brand owner.
- The product has been added by another user. (This sometimes happens with products from outside the Netherlands)
- You try to update the live database products with your test account (pre-production).

The manufacturer's name is empty in the XML.

There are brands which are private label (PL). These include the brands of a wholesaler. PL products can be retrieved using the PS-API, only the name and GLN of the producer shall not be included in the XML.

I get two results for one GTIN number.

It can happen that a product has been staged twice in PS. Thereby the GTIN is not unique. This is not the intention. PS aims to only have unique GTINs. Producers are addressed when using non-unique GTIN's.

Can I get quick links via the PS API to product sheets?

Yes, you can use the permalink. For more information see

<https://permalink.psinfoodservice.com/prod/>

8. Appendix

8.1. Example XML for the Match procedure

```
<envelope>
  <header>
    <origin>PSXML</origin>
    <version>1.0.0.0</version>
    <provider>PS In Foodservice</provider>
    <updateproductinfo>0</updateproductinfo>
    <updatespecificationinfo>0</updatespecificationinfo>
    <updatecommercialinfo>0</updatecommercialinfo>
    <updatelogisticinfo>0</updatelogisticinfo>
    <actiontype>GET</actiontype>
  </header>
  <body>
    <psidmatchlist>
      <psidmatch>
        <gtince>5000112601022</gtince>
        <gtinhe>5000112601022</gtinhe>
      </psidmatch>
      <psidmatch>
        <gtince>5000112594706</gtince>
        <gtinhe>5000112594706</gtinhe>
      </psidmatch>
    </psidmatchlist>
  </body>
</envelope>
```