



API PricePedia

PricePedia API REST V4 definition

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PricePedia API

Introduction

This document describes the REST APIs of the PricePedia portal.

API Version: v4

Protocol: HTTP

API Base URL: <https://api.pricepedia.it>

Authentication

Access to the API is only allowed using a specific "token" (alphanumeric string) associated with a PricePedia portal user account. To obtain a token and gain access to the API, you need to contact the PricePedia team via the form available at the following link:

```
https://www.pricepedia.it/profilo/contatti/
```

or by emailing info@pricepedia.it.

To authenticate, an HTTP "Authorization" header must be included in REST calls. The token should be passed as the content of the "Authorization" header, prefixed by the string "Token" separated by a space, as in the following example:

```
Authorization: Token 9944.....4b
```

Metadata

The available metadata is divided into two parts: general metadata, concerning the entire database, and product-specific metadata grouped into macro areas called "sections".

As we will see, the product-specific metadata contains the necessary information for users to make API calls.

Requesting Metadata

General metadata can be obtained as follows.

General Metadata

```
Method: GET  
URL: /v4/metadata/general/  
Parameters: None  
Output Format: JSON
```

```
{
  "index_base": "2022-01",
  "last_date": "2023-11",
  "last_date_historyeu": "2023-09",
  "last_date_historyusa": "2023-09",
  "last_update": "2023-12-15",
  "last_date_scenario": "2023-11",
  "last_date_wb_april": "2022-12",
  "last_date_wb_october": "2022-12"
}
```

Where:

- "index_base": is the base year of the index;
- "last_date": is the latest available observation for monthly data (except for Range);
- "last_date_historyeu": is the latest available observation for historyeu data;
- "last_date_historyusa": is the latest available observation for historyusa data;
- "last_update": is the last update date;
- "last_date_scenario": is the last scenario update date;
- "last_date_wb_april": is the date identifying the last historical scenario data from the World Bank of April;
- "last_date_wb_october": is the date identifying the last historical scenario data from the World Bank of October.

Product metadata is grouped into macro areas called "sections", which currently include:

- doganalieu
- doganaliusa
- scenario
- dailydata
- dailydata-country
- indicatori-congiunturali
- worldbank

A brief description of the various macro areas is provided below:

- doganalieu: area containing customs price series (EU market) of products available in PricePedia;
- doganaliusa: area containing customs price series (US market) of products available in PricePedia;
- scenario: area containing 24-month forecasts for a sample of products, prepared by the PricePedia team;
- dailydata: area containing daily financial prices, indices, and non-financial prices;
- dailydata-country: area containing data such as exchange rates and stock indices organized by country;
- indicatori-congiunturali: area containing economic indicators, such as the industrial production index, world trade indicators, exchange rates, etc.;

- worldbank: area containing 2-year forecasts for a sample of products, prepared by the World Bank.

To obtain the list of "sections" and the products belonging to them, you can proceed as follows.

Specific Metadata

```
Method: GET
URL: /v4/metadata/
Parameters: None
Output Format: JSON
```

```
{
  "doganalieu": [
    {
      "code": "ALACAA1",
      "description": {
        "it": "Mais",
        "en": "Corn"
      },
      "full_description": {
        "it": "Granturco, diverso da quello destinato alla semina (CN100590.00)",
        "en": "Maize (excl. seed for sowing) (CN100590.00)"
      },
      "currency": "EUR",
      "um": "Ton",
      "custom_code": "CN100590.00",
      "frequency": "M",
      "measures": [
        "lastprice",
        "lastpricenr",
        "historyeu",
        "range"
      ],
      "last_update": "2023-11-29"
    },
    {
      ...
    }
  ],
  "dailydata": [
    {
      "code": "ALACFIF",
      "description": {
        "it": "Avena (CME), prezzo/Bushel",
        "en": "Oats (CME), price/Bushel"
      },
      "full_description": {
```

```

        "it": "Future Avena (Chicago Mercantile Exchange)",
        "en": "Oats Future (Chicago Mercantile Exchange)"
    },
    "currency": "EUR",
    "um": "Bushel",
    "custom_code": "",
    "frequency": "D",
    "measures": [
        "1m",
        "3m"
    ],
    "last_update": ""
},
{
    ...
}
],
...
}

```

At the first level of the JSON, the key identifies the "section" or macro area of product belonging, and the value is an array of dictionaries containing all metadata for each product with the following characteristics:

- "code": product code, e.g., for Crude Oil "ENPTOL1";
- "typology": product typology code;
- "family": product family code;
- "description": dictionary with a brief description of the product, in Italian and English;
- "full_description": dictionary with a complete description of the product in Italian and English as reported by the source (Eurostat or commodity exchange);
- "um": product's unit of measurement;
- "custom_code": 8-digit customs nomenclature code for customs source prices;
- "frequency": frequency of the series values, which can be "D" (daily) or "M" (monthly);
- "measures": list of available measures for the specific product code;
- "last_update": the date of the last update of the series for monthly frequency products, in the format "YYYY-MM-DD".

Note that the list of "sections" and their related products may change in the future, with new products and new "sections" added.

Any changes to existing products and "sections" will be notified to API users in advance.

Product Search

Method: GET

URL: /v4/search/

Parameters:

– name: name of the product to search for (mandatory parameter).

Output Format: JSON

```
[
{
  "code": "COIDOB1",
  "description": {
    "it": "Oli bianchi",
    "en": "White Oil"
  },
  "full_description": {
    "it": "Oli bianchi e paraffina liquida, contenenti in peso >= 70% di oli di petrolio o di minerali bituminosi, in cui tali oli costituiscono il componente base (escl. destinati a subire una trasformazione chimica, quelli destinati a subire un trattamento definito ai sensi della nota complementare 4 del capitolo 27 nonchè quelli destinati ad essere miscelati conformemente alle condizioni della nota complementare 6 del capitolo 27) (CN271019.85)",
    "en": "White oils, liquid paraffin containing by weight >= 70% of petroleum oils or of oils obtained from bituminous minerals, these oils being the basic constituent of the preparations (excl. for undergoing chemical transformation) (CN271019.85)"
  },
  "measures": [
    "lastprice",
    "lastpricenr",
    "historyeu",
    "range_min",
    "range_max"
  ],
  "section": "doganalieu"
},
{
  "code": "ENCBGS1",
  "description": {
    "it": "Gasolio contenente biodiesel",
    "en": "Gas oils containing biodiesel"
  },
  "full_description": {
    "it": "Gasoli, contenenti, in peso, >= 70% di oli di petrolio o di materiali bituminosi, con un tenore di zolfo <= 0,001% in peso, contenente biodiesel (CN271020.11)",
    "en": "Gas oils of >= 70% of petroleum or bituminous minerals, with a sulphur content of <= 0,001% by weight, containing
```

```

        biodiesel (CN271020.11) "
    },
}
]

```

The answer is a list of dictionaries with the same data structure as in "Specific Metadata" query.

Price Data

Price Data Request

Once the metadata on the product of interest is identified, we can proceed with the extraction of price data.

Method: GET

URL: /v4/data/

Parameters:

- code: product code (mandatory parameter).
- section: product "section" (mandatory parameter).
- measure: measure of the product code. The parameter is not mandatory: if not specified, default measure will be returned; if specified, the exact measure will be returned, if it is available among the measures of the product code. In order to receive all the measures available at a time, the value "___all___" can be specified.
- currency: euros or US dollars,
- period_start: optional parameter used to filter data starting from the specified period. If not specified, the returned time series will start from the first available observation.
- period_end: optional parameter used to filter data up to the specified period. If not specified, the returned data up to the last available observation will be returned.

Output Format: JSON

```

{ 'data': [{ 'period': '2000-01-03', '1m': 1.072844400396432},
            { 'period': '2000-01-04', '1m': 1.057738961669092},
            { 'period': '2000-01-05', '1m': 1.05372299382716},
            { 'period': '2000-01-06', '1m': 1.049287639584135},
            { 'period': '2000-01-07', '1m': 1.064760793465577},
            { 'period': '2000-01-10', '1m': 1.07048587349692},
            { 'period': '2000-01-11', '1m': 1.057917316692667},
            ...
          ],
  'metadata': { 'codice': 'ALACFIF',
                'descrizione': { 'it': 'Avena (CME), prezzo/Bushel',
                                'en': 'Oats (CME), price/Bushel' },
                'descrizione_completa': { 'it': 'Future Avena (Chicago Mercantile Exchange)',

```

```
        'en': 'Oats Future (Chicago  
            Mercantile Exchange)'}},  
    'valuta': 'EUR',  
    'um': 'Bushel',  
    'tipo': 'F',  
    'codice_doganale': '',  
    'frequenza': 'D',  
    'misure': ['1m', '3m'],  
    'misura_default': '1m'}  
}
```

The JSON consists of a data structure with a "data" key and a "metadata" key.

The data key contains an array of data structures with the "period" key, which refers to the period of the data in string format, and a key that changes depending on the requested measure. In this case, the key is "1m", which refers to the 1-month continuous future contract.

The metadata key contains a data structure with information useful to the user. Among these we find:

- "codice": product code;
- "descrizione": short product description in Italian and English;
- "descrizione_completa": extended product description in Italian and English;
- "valuta": currency in which the product's price is expressed;
- "um": unit of measure in which the series is expressed;
- "tipo": type of data;
- "codice_doganale": if present, the customs code of the product in question;
- "frequenza": time frequency of the series;
- "misure": available measures in the series;
- "misura_default": default measure of the series.