

THE EUROPEAN DIRECTORATE FOR THE QUALITY OF MEDICINES & HEALTHCARE (EDQM)



European Pharmacopoeia Reference Standards

Handling, dispatch, where to find useful information and other
practicalities

**2019 Training Session
"The European Pharmacopoeia"**

Dr Pierre Leveau

EDQM Head of Reference Standards & Logistics Department

10 – 11 September 2019, Iselin, New Jersey, USA

TOPICS

- Before ordering
- Ordering
- Labelling
- What is expected from users
- Proving validity
- Monitoring & Stability programmes
- Shipping & Storing
- Safety
- Other source of information & FAQ

Before ordering

BEFORE ORDERING

Consult the online catalogue.

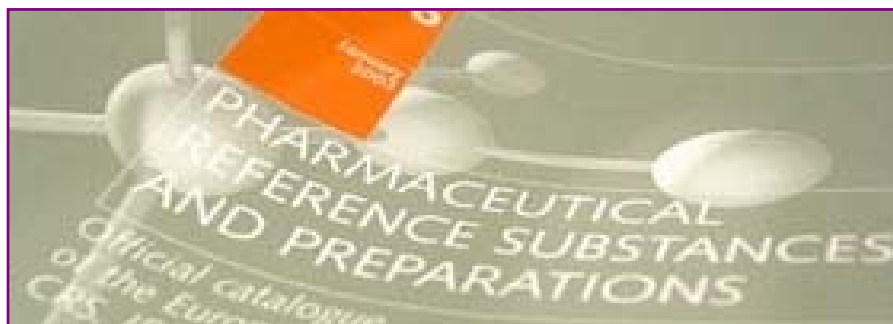
⚠ Specific catalogue for Ph. Eur. / ISA and ICRS (WHO)

BEFORE ORDERING


Available online.

Updated daily. English only.

- For searching database: <https://crs.edqm.eu>



BEFORE ORDERING

Search Database online | *Reference substances* 

Please enter a search term and select a search method using the drop menus below.


- If you select "contains", all entries containing your search term will be returned.
 - For example, if you enter "toco", both "tocopherol" and "ketoconazole" will be returned.
- If you select "is exactly", the entry that matches exactly your search term will be returned if it exists.

Search a that

Several possibilities to search for a RS:

Search a that

Catalogue Code
Monograph Number
CAS Registry Number
SDS Product Code

 CAS are provided for information only and are not independently verified.

You can also download the **European Pharmacopoeia daily Reference Standards catalogue:**

[in a pdf format](#)

[in a XML format](#)

Possibility to print the entire catalogue (interface with IT system in xml)

Please note that you can download the [Terms and Conditions of Supply](#)

You may also get a list of the new batches and new products by clicking on [New!](#)

See next slide

You can get CRS withdrawn from sale since 1 year by clicking on [Withdrawn](#)

BEFORE ORDERING

- Terms and conditions of supply
[https://www.edqm.eu/sites/default/files/medias/fichiers/Sales/edqm terms and conditions of sale 2019.pdf](https://www.edqm.eu/sites/default/files/medias/fichiers/Sales/edqm%20terms%20and%20conditions%20of%20sale%202019.pdf)
- List of new batches and new items
http://crs.edqm.eu/db/4DCGI/web_catalog_news
- RS withdrawn from sale in the past 12 months
http://crs.edqm.eu/db/4DCGI/web_catalog_old

BEFORE ORDERING

Catalogue Code	Y0001984
Name	Codeine for system suitability *-narc
Current batch number	1
Unit quantity per vial	10 mg
Number of vials per sales unit	1
Used in monograph(s)	0074, 0076, 1412
Assigned content	
Additional information	An original import permit is required to apply for an export licence from the French authorities (allow 6-8 weeks). Your permit must be valid for at least 3 months. You should apply for your import permit per vial: ~ 9,782 mg of codeine phosphate - 0,072 mg of thebaine - 0,031mg of norcodeine Please state on your purchase order your preferred airport.
Leaflet	click to download the leaflet
Chemical hazard	click to download Safety Data Sheet
Biological hazard	none identified
SDS Product Code	201600233
CAS Registry Number	N/A
Presentation	
Origin	click to download Origin Of Goods.pdf
Proposed Import HS code	293911
EDQM long term storage conditions	+5°C ± 2°C
Dispatching conditions	Ambient temp.
UN Code	Not classified
Shipping group	A2a
Price ¹⁾	79 EUR
Availability	Available
Sales restriction	No

Batches
batch 1 is valid at this date ▼
Print BVS

Prepare for customs and reception in your laboratory

New: composition to declare is now provided (!! anticipate)

SDS

Origin of goods
Proposed HS code

EDQM Dispatch and storage conditions

Availability

BEFORE ORDERING

Necessary documents in some cases:

- For **precursors, psychotropic** and **narcotic** substances: an original import permit to be sent to the EDQM
- For **biological material**: please check that you have the import permit (e.g. USDA permit)
- Some specific documents available from website:
 - ✓ Specific import form for Brazil
 - ✓ Letter replacing CoA
 - ✓ Legal Framework and Diplomatic Status of Reference Standards for Customs Purposes
- *Pending issue: the country of origin!*

Ordering

ORDERING

- Ph.Eur. RS can be ordered directly from EDQM:

<https://www.edqm.eu/en/ph-eur-reference-standards-orders-catalogue>

- Care should be taken when ordering from other sources:

Ambiente
: Refrigerado 2-8 °C
Data de Produção 12.12.2014
Data de validade: 12.12.2020

Sigma-Aldrich Brasil Ltda
Av. das Nações Unidas, 23.043
04798-100 São Paulo Brasil
+55(11)3732-3100



Division of Reference Standards & Services (DRS)
EDQM

ORIGIN OF GOODS

The European Directorate for the Quality of Medicines and Health Care (EDQM) is responsible for the establishment of quality standards for reference standards. These standards are used by member states to ensure the quality of their reference standards. The DRS is responsible for the production and distribution of these standards.

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE

Sign your file right for the following substance:

Substance	Quantity	Unit
Desferrioxamine	100mg	mg

See reports

Dr. Pierre HUBER
Division of Reference Standards and Services

EDQM


Address: 7, allée Jeanne, 12048
CH-1204, Switzerland
Tel: +41 22 919 11 00 - Fax: +41 22 919 11 01
E-mail: phs@edqm.eu or phs@edqm.ch



ORDERING


- EDQM does not have authorised distributors.
- EDQM is able to provide a list of organisations or companies known to re-sell EDQM products.
This [list](#) is available through the website.


ORDERING



Jun. 29/07/2019 09:04
EDQM SALES
Order Conf. 0000253380 from 29.07.2019

A EDQM SALES

 Vous avez répondu à ce message le 05/08/2019 14:55.
Nous avons supprimé les sauts de ligne en surnombre dans ce message.

 Order Conf. 0000253380 from 29.07.2019.pdf
39 KB

To cancel/modify your order, please contact orders@edqm.eu.
For any other requests, please contact us via our helpdesk www.edqm.eu/hd

Dear Customer,

Thank you for ordering from the Council of Europe/EDQM. Please take time to review the attached document.

IMPORTANT INFORMATION

- If you find any error or if you wish to amend/cancel your order, please contact us via orders@edqm.eu no later than 24 hours after receiving this email. Please include our order confirmation number in the subject line of your message. Unfortunately, after this deadline, no modifications or cancellations can be accepted.
- The texts in the comment box and/or on each article line may require your attention and additional information before shipment can take place, please ensure you check this carefully.

REFERENCE STANDARD ORDERS

- The dates mentioned on the attached document are availability dates.
- Shipping dates will be provided subsequently.
- Some items/countries cannot be delivered door to door even if you requested it on your order (see our incoterms in our document Order and dispatch of EDQM products - to be found on our website www.edqm.eu).
- Invoices are issued after the goods have been shipped.

- When an order is sent, you have **24 hours** to correct or cancel the order.
- Then, the order is blocked **24 hours** for preparation (no possible change).
- We privilege door-to-door shipment.

ORDERING

POS	Reference	Qty	Unit Price	Qty x Price	Discount		Estimated availability	Subtotal
					%	€		
10	Y0001884 - Remifentanyl impurity mixture - "narc CRS" SDS Product code: 201601105 1 vial(s) per sales unit ; 15 mg per vial We require your original import permit to apply for an export licence from the French authorities (allow 4-6 weeks). Your permit must be valid for at least 3 months. EDQM Price Net Value	10					12.08.2019	
			79,00	790,00				790,00

POS	Reference	Qty	Unit Price	Qty x Price	Discount		Estimated availability	Subtotal
					%	€		
10	E1515000 - Erythropoietin BRP 1 vial(s) per sales unit ; 6 mg per vial E1515000 limited to 9 every 90 days. We can only supply 9 units. For further units, resend your order accordingly. EDQM Price Net Value	9					13.02.2019	
			500,00	4.500,00				4.500,00

➤ **Always have a close look to the AoR**

➤ Shipping dates are known at the time of parcel preparation, not before

➤ Impossible to make door-to-door for some destinations because of shipping companies restrictions (even if requested at order stage!!)

➤ Ice: delivered at the closest "customs" airport!

➤ **Chase your broker, if any (especially for ice / dry ice) & ANTICIPATE CUSTOMS ISSUES**



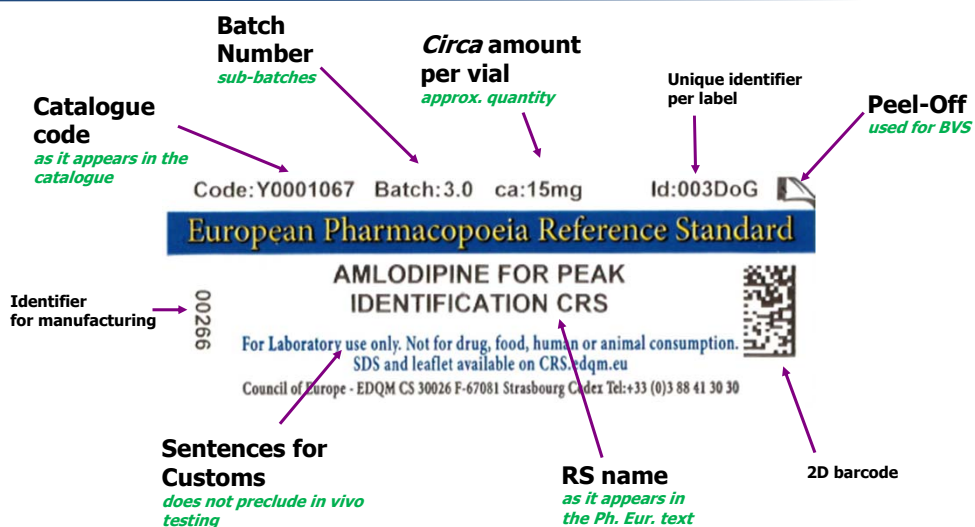
Labelling

LABELLING

Includes:

- Primary label AND the pictogram;
- Secondary label (displaying the pictograms on the outer package);
- Leaflet

LABELLING



LABELLING

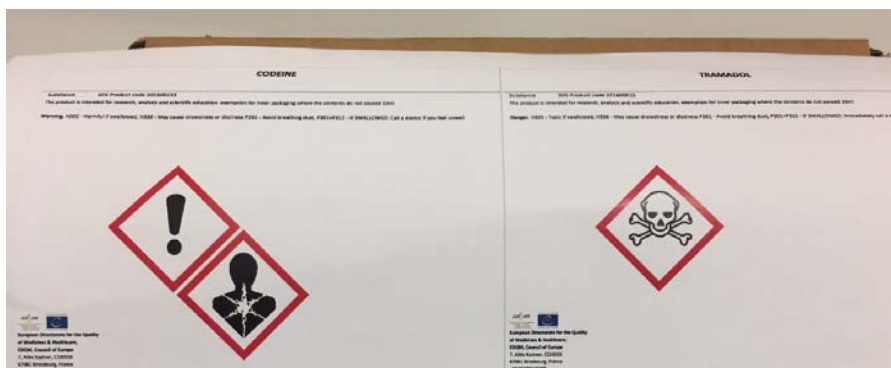


Safety information

Warning tag
(if any)

LABELLING

Safety Information is also provided on the external secondary package: pictograms and warnings (in the language of the country).



LABELLING

Additional information is provided in the information leaflet:

* if used as an assay standard the following information is also given:

- the assigned percentage content;
- or, the content in mg or mL of the chemical entity in the container;
- or, the assigned potency (for biological assays or microbiological assays) in units either per mg or per vial.

This is not mentioned on the primary label anymore!

* type-chromatograms, stoichiometric conversion factor, etc. are also available in the leaflet.

LABELLING



Provides mono number

Analytical information

Specific instruction

EDQM storage conditions

European Directorate for the Quality of Medicines & HealthCare
European Pharmacopoeia (Ph. Eur.)
Address: 15, rue de la Loi, 1050 Brussels (Belgium)
Tel: +32 (0)2 66 41 20 21 Fax: +32 (0)2 66 41 27 71
For any queries: enquiries@edqm.eu

 **EDQM**
European Directorate for the Quality of Medicines
and the Pharmaceutical Inspection
Council of Europe


INFORMATION LEAFLET Ph. Eur. Reference Standard
Codine impurity A CRS batch 5

Catalogue code: Y0000334 Unit Quantity: ca 15 mg

1. Identification
Reference Standard for laboratory tests as prescribed in the European Pharmacopoeia only.
Intended for use with the monograph(s) 0075.

2. Analytical information
2.1 Intended use
Reference Standard for laboratory tests as prescribed in the European Pharmacopoeia only.
Intended for use with the monograph(s) 0075.

2.2 Analytical information related to intended use, when applicable
Codine impurity A CRS 5 is supplied as the free base.
For the calculation of the amount of codine impurity A in the monograph for codine phosphate trihydrate (0075), multiply the peak area of impurity A obtained with reference solution (3) by a stoichiometric conversion factor of 0.9148 (M_A/M_B = 0.2).
Note: Molecular masses used for the calculation of the stoichiometric conversion factor in this leaflet:
M_A: codine impurity A (base): C₁₉H₂₁N₂O₂ = 313.40 g/mol
M_B: codine impurity A (phosphate trihydrate): C₁₉H₂₁N₂O₂ · 3H₃PO₄ · 1.5H₂O = 438.42 g/mol

2.3 Uncertainty of the assigned value, when applicable
The uncertainty of the assigned value is not stated since it is considered to be negligible in relation to the defined limits of the method-specific assays for which the reference standard is used. Please also refer to Ph. Eur. chapter 5.12.

2.4 Stability
Ph. Eur. RS are periodically tested to ensure their continuous fitness for purpose. For each valid Ph. Eur. RS, a Batch Validity Statement at the time of use can be downloaded and printed from the EDQM website (Reference Standards Database).

2.5 Instructions for use
The container should not be opened until required for use. Allow the closed container to equilibrate at ambient temperature before opening to avoid uptake of moisture. Use "as is". Do not dry/breakdown before use. Ph. Eur. RS are for immediate use. Once the container has been opened, its entire content must be used immediately. No further storage and re-use are permitted.

Storage conditions
In the original container at +5°C to +20°C, protected from light. Re-estate promptly upon receipt.

3. Safety
For scientific research, development and analysis only. Handle in accordance with good occupational hygiene, safety and laboratory practices and take precautions to avoid exposure. More information is available at the EDQM website (Reference Standards Database): Safety Data Sheet for hazardous chemicals and Safety Data Statement for other materials.

4. Shipping conditions
Each Ph. Eur. RS is shipped under conditions that preserve its suitability for use and comply with the relevant regulations. For more details see EDQM website (Reference Standards Database).

5. Warranties, liabilities and responsibility
a. Safety
In the event of any safety concerns, please read carefully the safety data sheets or safety data statements available for each product. It is for Purchasers to determine independently the risks associated with the items and to take appropriate safety measures, including the provision of appropriate information, equipment and training of those persons coming into contact with the item.

6. Warranties
Enough for the use of Reference Standards in tests and assays carried out in accordance with the official methods of the European Pharmacopoeia and by professionals with the necessary technical skills and at their own discretion and risk, the EDQM makes no representation, contractual statement, or expression of opinion concerning the quality or safety of any item supplied, the presence of any defect in it, or its fitness for any particular purpose except that as described above.

The EDQM does not guarantee that the items will meet the Purchaser's specific expectations. The EDQM only guarantees that the items: (i) were fit for use according to EDQM's stated use of the product; (ii) were fit for use at the moment that they were handed over to the carrier being responsible for the delivery of the items to the Purchaser with such accessories including packaging, delivery instructions or other instructions for the item's delivery and reception as the Purchaser may expect to receive; and (iii) possess qualities and performance capabilities which are normal in goods of the same type and which the Purchaser may expect given the nature of the goods and the information provided on the EDQM's website and (iv) the carrier and the Purchaser received clear and accurate instructions for the item's delivery and reception. No other guarantees, whether explicit or implicit, are given by the EDQM. The EDQM does not guarantee that the purchase or use of the items will not infringe any intellectual property rights, in particular patents.

7. Limitation of Liability
In no event shall the EDQM be liable for any damages due to the use of items, included, but not limited to loss of business, loss of profit, loss of use, loss of opportunity, costs of procurement of substitute goods, services or solutions or for any indirect, special, incidental, punitive or consequential damages, however caused and whether in contract, tort or under any other theory of liability, whether or not the Purchaser has been advised of the possibility of such damages or costs.

The liability of the EDQM for injury, loss or damage arising from the supply or use of any such item is in any event limited to the value of the item supplied. Intentionally acquired commercial standards, if purchased, are liable to be lost or damaged.

8. Arbitration & Applicable Law
The aim of the EDQM is to settle any disputes amicably in the framework of its Terms and Conditions. In accordance with the provisions of article 21 of the General Agreement on the Privileges and Immunities of the Council of Europe, all disputes between the EDQM and the Purchaser as regards the application of these General Terms shall be submitted, if a mutual agreement cannot be reached between the parties, to arbitration as laid down in Order No. 461 of the Secretary General, approved by the Committee of Ministers.

This transaction shall be governed by the Council of Europe's relevant regulatory framework, implemented, where necessary, by French national substantive law.


9. Citation
Users shall ensure that any reference made to an EDQM Reference Standard in any publication, presentation or public document (i.e. scientific articles, data sheets for third parties) lists the exact name, and catalogue code of the Reference Standard and the exact name and address of EDQM as given on the first page of this information leaflet.

10. Adoption
The suitability for intended use has been officially adopted by the European Pharmacopoeia Commission.

11. Signatures
This document is approved by:

Ms Caroline Officiel
Head of the Quality and Risk Management Section

Signed on: 10/05/2019
J0000334 Rev. 02 (24/05/2019)

 Rev. 3 1/2

Signed on: 10/05/2019
J0000334 Rev. 02 (24/05/2019)

Cat. Code: Y0000334 Rev. 3 2/2

What is expected from the user

WHAT IS EXPECTED FROM THE USER

Immediately before using a Ph. Eur. Reference Standard, the following shall be checked:

- that the reference standard batch number be current at the time of use. Print the real-time batch validity statement (BVS) available online;
- that the container/closure system integrity be kept, i.e. absence of visible defects originating from shipping;
- that the reference standard after receipt has been stored at the conditions prescribed in the Ph. Eur. RS catalogue.

WHAT IS EXPECTED FROM THE USER

Moreover, allow the RS to equilibrate to lab temperature before opening.
Use "as is" unless indicated in the leaflet.

Depending on the quantity in the vial, two main glass vials are used:

- for filling weights > 15 mg

Brown glass vials (type 7 mL)

NB: also used for evaporation



- for filling weights > 15 mg

V-vials facilitating the recovery of the powder



Proving validity

PROVING VALIDITY

No expiry date nor retest date is stated on the label

Use BVS

PROVING VALIDITY

Official Codeine imp. A CRS batch number = 5 => Check online BVS



BATCH VALIDITY STATEMENT EUROPEAN PHARMACOPEIA REFERENCE STANDARDS (CRS) & (BRP) *This Batch Validity Statement has to be used in conjunction with Ph. Eur. general chapter 5.1.200 Reference Standards.*

European Directorate for the Quality of Medicines & HealthCare (EDQM) – Council of Europe
Postal address: 7 Allée Kastner CS 30026 F - 67081 STRASBOURG (France)
Phone: +33 (0)3 88 41 30 30
Fax: +33 (0)3 88 41 27 71
Internet: <http://www.edqm.eu>

Name	Codeine Impurity A
Batch number*	Y0000224
Assigned Value	5
Validity	Batch 5 is valid at the printing date: 2019-8-20
Additional information	
Storage conditions	Recommended EDQM storage conditions for unopened containers: +5°C to +30°C
Safety data	Safety Data Sheet is available from the detailed view or upon request.
Leaflet	Click on the hyperlink to download the leaflet containing the instructions for use, click to download the leaflet
Origin	Click on the hyperlink to download the origin to check if import permit is required in your country, click to download Origin Of Goods.pdf

Batch 5 is official at the time of printing

* This BVS also includes sub-batches.
This statement is valid at the date of printing: 2019-8-20

Also valid at the date of printing for sub-batches

PROVING VALIDITY

BUT: batch 4 is still valid until 10/31/2019 => Check online BVS

Catalogue Code	Y0000334	Batches
Name	Codeine impurity A	
Current batch number	5	batch 5 is valid at this date
Unit quantity per vial	15 mg	batch 5 is valid at this date
Number of vials per sales unit	1	batch 4 : validity until 31 October 2019
Used in monograph(s)	0075	
Assigned content		
Additional information	7,8-didehydro-4,5a-epoxy-3,6a-dimethoxy-17-methylmorphinan (methylcodeine)	
Leaflet	click to download the leaflet	
Chemical hazard	Click to download Safety Data Sheet	
Biological hazard	none identified	
SDS Product Code	201600233	
CAS Registry Number	2859-16-7	
Presentation		
Origin	click to download Origin Of Goods.pdf	
Proposed Import HS code	293919	
EDQM long term storage conditions	+5°C ± 3°C	
Dispatching conditions	Ambient temp.	
UN Code	Not classified	
Shipping group	A1A	
Price*	79 EUR	
Availability	Available	
Sales restriction	No	

PROVING VALIDITY



BATCH VALIDITY STATEMENT EUROPEAN PHARMACOPOEIA REFERENCE STANDARDS (CRS) & (BRP) *This Batch Validity Statement has to be used in conjunction with Ph. Eur. general chapter 31200 Reference Standards.*

European Directorate for the Quality of Medicines & HealthCare (EDQM) – Council of Europe
Postal address: 7 Allée Kastner CS 30026 F - 67081 STRASBOURG (France)
Phone: +33 (0)3 88 41 30 30
Fax: +33 (0)3 88 41 27 71
Internet: <http://www.edqm.eu>

Batch 4 is still official at the time of printing

Name	Codeine impurity A
Catalogue code	Y0000334
Batch number	4
Batch validity	n/a
Validity	Batch 4 is valid until 2019-10-31
Additional information	
Storage conditions	Recommended EDQM storage conditions for unopened containers : +5°C ± 3°C.
Safety data	Safety Data Sheet is available from the detailed view or upon request.
Leaflet	Click on the hyperlink to download the leaflet containing the instructions for use, click to download the leaflet
Origin	Click on the hyperlink to download the origin to check if import permit is required in your country, click to download Origin Of Goods.pdf

* This BVS also includes sub-batches.
This statement is valid at the date of printing : 2019-8-20
Legal notice
The Council of Europe (EDQM) makes no representation or warranty with respect to the accuracy, completeness, or timeliness of this electronic statement.
The Council of Europe (EDQM) shall not be liable in respect of any printed errors or omissions.

PROVING VALIDITY

EDQM 2019 BVS - Customs inquiry 4

BATCH VALIDITY STATEMENT
EUROPEAN PHARMACOPOEIA REFERENCE STANDARDS (ERS) & (BRP)
This Batch Validity Statement has to be used in conjunction with Ph. Eur. general chapter 3.2/3.20 Reference Standards

European Directorate for the Quality of Medicines & HealthCare (EDQM) - Council of Europe
Postal address: F-67082 Strasbourg CS 9024 F - 67081 STRASBOURG (France)
Phone: +33 (0)3 88 41 30 30
Fax: +33 (0)3 88 41 37 70
Internet: <http://www.edqm.eu>

Catalogue code: Y0000334
Batch: 4
Number*: 4
Assigned value: N/A
Validity: Batch 4 is valid until 2019-10-31
Additional information:
Storage conditions: Recommended EDQM storage conditions for unopened containers: +5°C ± 2°C
Safety Data Sheet is available from the national site or upon request.
Safety date: Click on the hyperlink to download the safety data sheet containing the instructions for use, [click to download the SDS](#)
Leaflet: Click on the hyperlink to download the leaflet to check if import permit is required in your country, [click to download import permit](#)
Origin: Click on the hyperlink to download the origin to check if import permit is required in your country, [click to download origin](#)

* This BVS also includes sub-batches.
This statement is valid at the date of printing: 2019-09-20

The Council of Europe (CoE) is responsible for the management of the EDQM Reference Standards, in accordance with the provisions of the Convention for the Protection of the Human Rights and Fundamental Freedoms, as amended by subsequent protocols.

Batch number: 4011217 - 1011217 - 1011217

EDQM BRP Y0000334 01 2019

Carole L. G. G.

<http://www.edqm.eu/EDQM/BVS>

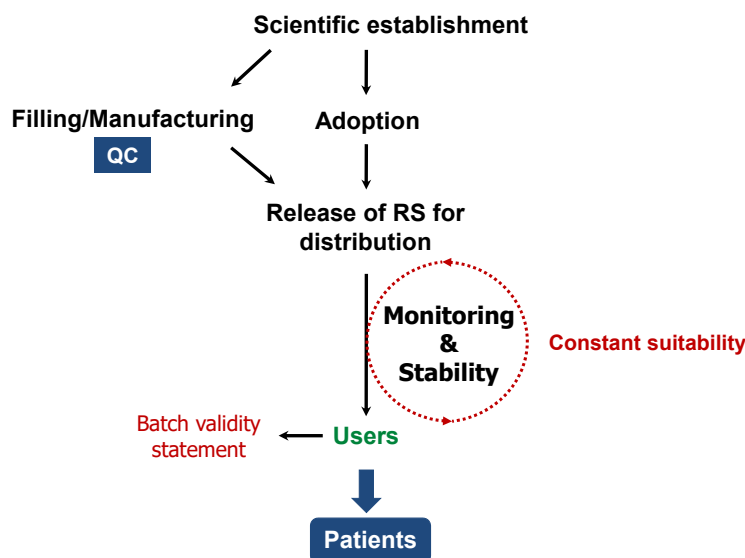
At the time of analysis:

- Print out the BVS,
- Stick the peel-off label.

This ensure that you have used the official CRS at the time of use

Monitoring & Stability programmes

Monitoring & Stability programmes



MONITORING & STABILITY PROGRAMMES

✓ Why?

- Chapter 5.12. Reference standards - Part 6. Re-test programme of Ph. Eur. standards.
- « A system is established and implemented to ensure the continued fitness-for-use of the European Pharmacopoeia reference standards. »

Once established, adopted and released for distribution, the Chemical Reference Substance (CRS) and Biological Reference Preparation (BRP) are checked regularly to demonstrate their suitability for the purposes for which they are intended (e.g. assay standard, external standard, identification, peak identification, system suitability...).

Designed to **detect** at an early stage any sign of degradation using appropriate analytical techniques

MONITORING & STABILITY PROGRAMMES

✓ *When?*

The re-test programme is applied taking account of the known physico-chemical properties and stability data of the reference standards.

Reference standards are periodically tested for stability during storage.

The periodicity (from 12 to 60 months) and extent of re-testing depends on a number of factors including :

- intended use (qualitative / quantitative)
- physico-chemical properties & predicted stability information available
- mode of preparation (powder filling, lyophilisation, evaporation...)
- storage conditions

The re-test period may be prolonged or decreased with the support of sufficient data.

MONITORING & STABILITY PROGRAMMES

✓ *How?*

The monitoring programme is designed to detect at an early stage any sign of decomposition using appropriate analytical techniques.

The focus is on the properties that may change during the life cycle of a CRS (*i.e.*: water content, purity by LC/GC/TLC, IR, UV).

The methods used are chosen from amongst those performed during establishment (so that baseline data are available) and chosen for their sensitivity & applicability to small quantities :

- micro-determination of water, gravimetric analysis (TGA)
- stability-indicating separation techniques (LC-UV/ELSD/CAD, TLC, GC)
- determination of molar purity (DSC)
- other specific tests for detecting impurities (NMR)

MONITORING & STABILITY PROGRAMMES

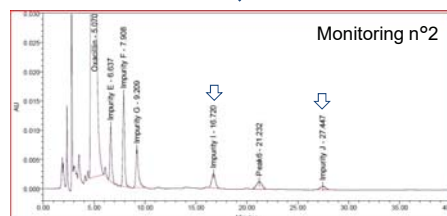
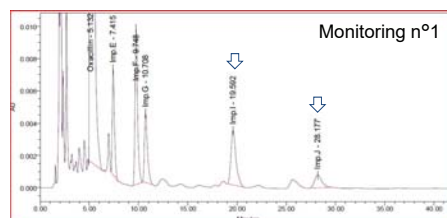
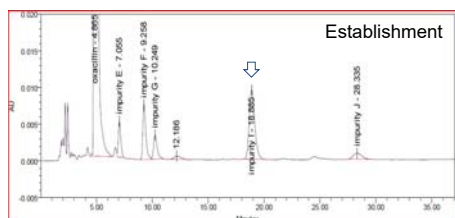
Criteria of acceptance/rejection:

Any significant differences observed compared to the establishment and to the previous examination(s) will lead to more extensive examination and if necessary to the re-establishment or to the establishment of a replacement batch.

The maximum permitted variation is pre-defined depending on the use of the substance (*e.g.* identification by IR or TLC, SST, purity testing, assay...).

MONITORING & STABILITY PROGRAMMES

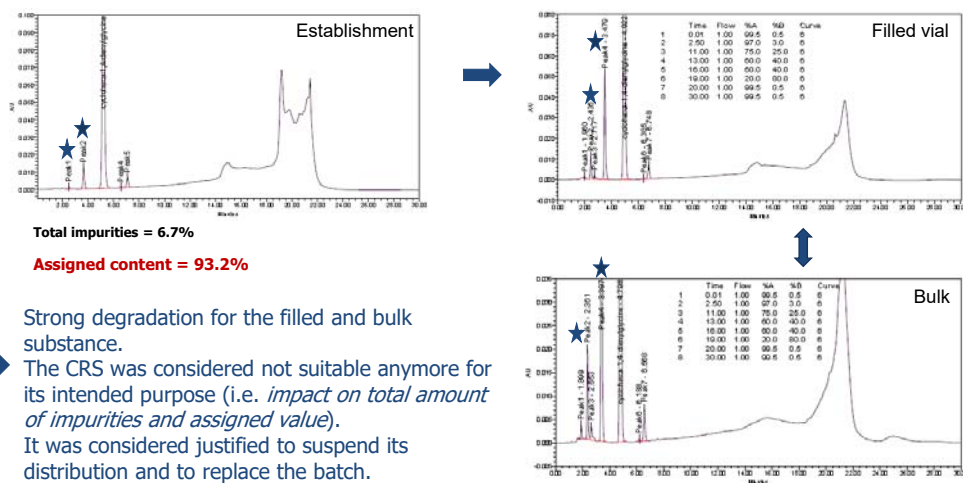
Example: CRS used for peak identification



➡ All the impurities are still detected.
The CRS is still suitable for its use but given the trend noted for impurities I and J, a quality replacement will be initiated.

MONITORING & STABILITY PROGRAMMES

Example: CRS used as external standard



Strong degradation for the filled and bulk substance.

The CRS was considered not suitable anymore for its intended purpose (i.e. *impact on total amount of impurities and assigned value*).

It was considered justified to suspend its distribution and to replace the batch.

MONITORING & STABILITY PROGRAMMES

✓ Why?

New

ISO 17034:2016

General requirements for the competence of reference material producers.
Chapt. 7.11. Assessment and monitoring of stability

ISO Guide 35:2017

Reference materials – Guidance for the characterization and the assessment of the homogeneity and stability of the material.
Chapt. 8. Assessment and monitoring of stability

« ...The reference material producer shall:

- assess, by experimentation if necessary, the stability of all relevant properties of the reference material under proposed storage conditions...
- assess by experimentation if necessary, the stability of all relevant properties of the reference material under proposed conditions of transport, and choose pre-treatment, packaging and storage conditions in accordance with the results of the assessment...
- select a scheme for monitoring the stability of materials held on long term storage that permits prompt detection of change, taking into account the possible rate of change... »

"Concurrent approach"
(real-time data)



"Prospective approach"
(predictive data)

MONITORING & STABILITY PROGRAMMES

✓ *Why?*

Multiple uses:

- to predict RS stability and to anticipate stability problems and therefore avoidance of RS recalls
- to help to identify/validate RS best storage / shipping conditions
- to better adjust the monitoring cycle
- to contribute to selection of the proper batch size

MONITORING & STABILITY PROGRAMMES

✓ *What?*

- Not applicable to all RS but to a selected number:
 - new RS/ existing RS
 - mixtures (SST, FPI)/ RS for quantitative use
 - LC/GC method available
 - RS adopted (homogeneity)
 - If sufficient batch size

MONITORING & STABILITY PROGRAMMES

✓ *How?*

➤ Types of stability studies :

- Not ICH stability
- Short-term & Long-term
- Different temperatures & different times

➤ Design of stability studies : isochronous / continuous

MONITORING & STABILITY PROGRAMMES

✓ *Outcome*

In case of issue affecting the proper use of the RS, a warning notice would be sent to those having ordered the RS with precise instruction.

Be careful if you use distributor.

Shipping and storing

SHIPPING & STORING

Packing materials (carton, boxes) are selected to minimise the risk of damage during transport and are compliant to the transport regulation prescription when applicable (IATA, ADR, IMDG).



SHIPPING & STORING

Since Sept 2018, new packing materials have been introduced.

Specifications

+5°C => +1°C / +8°C

-20°C => -15°C / -25°C

Dry ice => -70°C / -50°C

For three days.

SHIPPING & STORING

Dispatching conditions:

- ✓ Ambient temperature
- ✓ Under ice
- ✓ Under dry ice

Recommended storage conditions:

- ✓ +5°C or -20°C
- ✓ +5°C or -20°C
- ✓ -20°C or -80°C or Liq N₂

Dispatch at ambient temperature – short excursions from the long-term storage temperature during shipping are not considered to significantly affect the quality of the reference standard.

SHIPPING & STORING

EDQM storage conditions are established for **long-term** storage.

They are based on:

- Stability data,
- Data received from supplier of the bulk material,
- Monitoring,
- Literature,
- Ph. Eur. information.

User is free to adopt other storage conditions, under its own responsibility.

SHIPPING & STORING

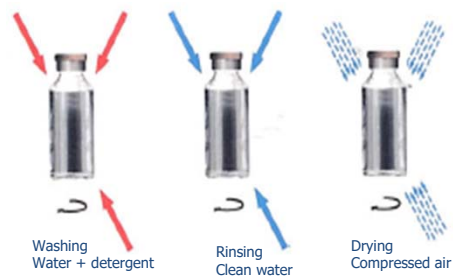
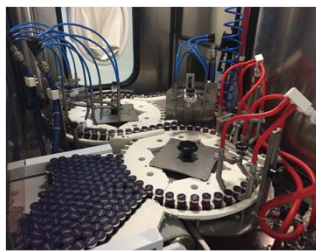
For optimal stability, storage temperature **one level below monograph prescription.**

- Room temperature -> +5°C
- +2 to 8°C -> -20°C (if possible, liquids...)
- Under -15°C -> -20°C
- -20°C -> -80°C (if possible)
- -50°C -> -80°C
- -80°C -> liquid nitrogen

Safety

SAFETY

The external part of the vials containing Substances of Very High Concern is washed after manufacturing in order to protect staff using CRS.



SAFETY

Latest news

August 2019

Update of Chemical/Biological hazard for reference standards (SDS)

The list of revised classifications [is available here](#)

The revised SDS can also be searched in the [reference standards database](#)

How to access the SDS



SDS can be accessed via the European Pharmacopoeia RS database:

Search European Pharmacopoeia Reference Standards

And the WHO RS databases:

Search ISA Reference Standards

Search ICDS Reference Standards

Safety Data Sheet (chemicals) and Safety Data Statement (bio) are available from website.

You will also find a cumulative list of changes in the safety classification

NOTES:

- **Hazardous Chemicals:** the EDQM complies with UNECE globally harmonised system for classification and labelling of chemicals; as enacted in the EU.

SDSs are not provided for materials for which no hazard has been identified. In such cases, the hazard status of the material is available in the database and is also published on the shipping documents (with the text: "Hazard: none identified").

- **Biologicals:** Directive 2000/54/EC applies. EDQM issues Safety Data Statements if a hazard has been identified.
- Safety documentation is provided for occupational health only and is not part of quality standards.

Other sources of information & FAQ

OTHER SOURCE OF INFORMATION & FAQ

EDQM issues a monthly news & a monthly newsletter.

[Home](#) [About us](#) [European Pharmacopoeia](#) [Reference Standards](#) [Certification of Suitability](#) [OMCL Network](#) [Transfusion & Transplantation](#) [Patient & Health P](#)

Reference Standards

What's new?

[Latest News](#)

[Events](#)

Ph. Eur. RS

[Ph. Eur. RS Purpose & Use](#)

[Ph. Eur. RS Orders & Catalogue](#)

WHO RS

[WHO ISA Purpose & Use](#)

[WHO ISA Orders & Catalogue](#)

[WHO ICRS Purpose & Use](#)

[WHO ICRS Orders & Catalogue](#)

Find information on

[Participate in an ISA Study \(pdf\)](#)

[Ph. Eur. Standard order form](#)

[WHO ISA Standard order form](#)

[WHO ICRS Standard order form](#)

[FAQ & Helpdesk RS](#)

[Reference Standards Training Resources](#)

You can subscribe!

OTHER SOURCE OF INFORMATION & FAQ

It contains:

- **New** and **Replacement** batches
- **Removed** items

NEW: proposal under evaluation to keep it for additional 12 months in the catalogue for RA requirements in some countries

- Change of **sales unit**
- Information on **changes of storage / shipping conditions**

NEW: unless QA issue, changes are now announced in advance (change will occur on the 15th of the next month, if possible)

- Information on reference standards currently **out of stock**

NEW: when technical information is provided.

OTHER SOURCE OF INFORMATION & FAQ

FAQ

Directly available from the website.

TOP 10 Questions

OTHER SOURCE OF INFORMATION & FAQ

• How can I obtain the CoA?

The EDQM does not provide certificate of analysis.
Needed data are available in the information leaflet.

If you want to use the RS for another use, it is done under user's responsibility.

OTHER SOURCE OF INFORMATION & FAQ

- I do not find the expiry date

No expiry date is provided. It is down to the user to demonstrate that the CRS/BRP used in an official Ph. Eur. test or assay was current at the time of use. The BVS is used for this purpose. In case of replacement batch, a validity is provided in the online catalogue.

Therefore, it is recommended to purchase only a sufficient amount for analysis and to use the products as soon as possible.

Once the container has been opened, weighing should be carried out immediately. Any further storage and re-use are not warranted.

OTHER SOURCE OF INFORMATION & FAQ

- I do not find the purity

RS are established for a precise intended use. In case the purity / assigned value / activity is not mentioned in the information leaflet, it means that this value is not needed to carry out the test/assay described in the related monograph(s) and therefore it is not provided.

!! it cannot be assumed to be 100%. The only exception is the purity of an **impurity** CRS, which can be estimated to be **100% for the tests** of the monographs, **if the EDQM has not stated the purity.**

OTHER SOURCE OF INFORMATION & FAQ

- There are two weights declared: on the label and on the leaflet, which one should I use?

tel. +33 (0)3 88 41 20 55 fax. +33 (0)3 88 41 27 71
For any questions: www.edqm.eu (HelpDesk)

INFORMATION LEAFLET Ph. Eur. Reference Standard
VERBENALIN CRS batch 1

1. Identification
Catalogue code: Y0000661 Unit Quantity: ca 11 mg

2. Scientific Information
2.1 Intended use
Reference Standard for laboratory tests as prescribed in the European Pharmacopoeia only.
Established for use with the monograph(s): 1854.

2.2 Analytical information related to intended use, when applicable
The "as is" content is : 0.97 mg per vial C17H24O10

« gravimetric » weight declared for customs (also on the label)

In this case: freeze drying qty = (API+excipients)

Declared content to be used for analytical purpose

OTHER SOURCE OF INFORMATION & FAQ

- I cannot recover the quantity from the vial

Each vial or ampoule is individually weighed during manufacturing and therefore contains a quantity sufficient for the prescribed use.

Nevertheless, since there is usually a very low quantity, the product may be distributed between the inner surface and the rubber stopper.

To avoid this problem and recover the full quantity, we usually recommend gently tapping the bottom of the vial several time in order to bring down the product. You can also use an anti-magnetic device to easily collect the powder.

If the test / product allows, you can also work by differential weighing.

OTHER SOURCE OF INFORMATION & FAQ

- The parcel arrived with cool packs thawed, is it suitable for use, may I obtain stability data?

Excursion outside recommended temperature usually does not jeopardise the quality of the RS.

In case of question, the EDQM will analyse the case with available data and will make a recommendation.

Stability data cannot be shared.

OTHER SOURCE OF INFORMATION & FAQ

- Is there a QMS applied to RS? May I have a copy of the certificate?

The EDQM is ISO 9001 certified for the conduct of laboratory studies and RS production.

The EDQM laboratory is also ISO 17025 accredited for 20 analytical techniques used in the RS establishment.

Both certificates are available from the [website](#).

OTHER SOURCE OF INFORMATION & FAQ

- May I store the RS at different conditions than those stated in the catalogue?

The storage conditions mentioned in the catalogue are intended to preserve the integrity of the CRS during **long-term** storage.

We base our conditions on supplier's information, stability data (when available), monitoring data and bibliography.

Our storage conditions are in most cases more stringent than those given in the monograph.

Provided that you can demonstrate that the RS is fit for use at your chosen T°, nothing prevent you to do so.

OTHER SOURCE OF INFORMATION & FAQ

- I want an old BVS / leaflet

For the leaflet, it can be provided on request.

For the BVS, it is not possible.

OTHER SOURCE OF INFORMATION & FAQ

- I disagree with the CAS number provided in the catalogue

The CAS number provided are not independently verified by the EDQM. They are provided only to help the user and most of the time refer to the CAS number of the parent substance mentioned in the Pharmacopoeia, so it can differ.

OTHER SOURCE OF INFORMATION & FAQ

- Other tips for the US

- We do not provide packing list,
- We provide proforma for customs clearance (invoice sent within 24 hours by mail),
- [FDA/TSCA Certification](#) should be provided by the importer or an authorized agent of the importer (EDQM cannot provide it),
- Gross weight is not mentioned on our invoices/proforma,
- We cannot authenticate our document by a Chamber of Commerce,
- We do not have a FDA registration N° - FDA product Id,
- **BE VERY PROACTIVE FOR BIOLOGICAL MATERIAL** (e.g. insulin, lactose, etc.) – we cannot provide IND N°.

OTHER SOURCE OF INFORMATION & FAQ

Still a question?

Helpdesk

Directly available from the website with a direct link to FAQs

NEW: a completely new Helpdesk will be launched by the end of September.

Thank you for your attention



Stay connected with the EDQM

EDQM Newsletter: <https://go.edqm.eu/Newsletter>

LinkedIn: <https://www.linkedin.com/company/edqm/>

Twitter: @edqm_news

Facebook: @EDQMCouncilofEurope