

## SUPPLY OF CULTURES

**ORDERING: Cultures of Filamentous Fungi, Yeasts, Bacteria and Actinomycetes should be ordered from:**

### Westerdijk Fungal Biodiversity Institute (CBS)

**Visit address**  
**Uppsalaalaan 8**  
**3584 CT UTRECHT**  
**The Netherlands**

**Telephone + 31 (030) 2122600**  
**Fax +31 (030) 22122601**  
**sales@wi.knaw.nl**  
**www.wi.knaw.nl**

**Postal address**  
**P.O. Box 85167**  
**3508 AD UTRECHT**  
**The Netherlands**

Unless a particular strain is required, customers are requested to state the purpose for which the cultures are to be used (e.g. taxonomic studies, physiological work) or whether sporulation is imperative, in order to permit the mycologists in charge of the collection to select a suitable strain. This is particularly important, as some properties of strains may have been lost during prolonged cultivation.

#### DELIVERY

The majority of the strains is maintained as lyophilized cultures and will be distributed as such. The advantage of these cultures is that they do not require special storage or transport conditions and they can be dispatched immediately. Cultures kept on agar slants or frozen must first be grown and checked. When placing orders for non-lyophilized cultures, enough time should be allowed for cultivation before delivery. Usually cultures can be dispatched after 2-3 weeks. However, if a slow-growing culture is involved or if a strain has to be purified, this period may be considerably longer. Strains that are only preserved frozen will also be revived and are dispatched on agar slants. Conditions of cultivation are indicated on each label. Recipes of media can be found on our website. Instructions for reviving freeze-dried fungal cultures are enclosed in the package.

#### SHIPMENT

Cultures will be sent to the address as given by the customer. Westerdijk Institute is not responsible for the non-arrival of cultures when the address given is incorrect or incomplete. Shipment will be made by Postal Service but be aware that delivery is not guaranteed and a tracking number is not applicable. For shipments by postal service Westerdijk Institute is not responsible for the non-arrival of cultures and complaints about non-receipt are not taken in process. Shipment by courier (FedEx) can be done on your request at extra charges.

#### RISK GROUP 2/3 MICROORGANISMS AND GENETICALLY MODIFIED ORGANISMS (GMO's)

Human pathogens and GMO's have to be sent by courier in accordance with ADR/IATA regulations. Depending on the address of delivery, you will incur additional charges for the courier. These additional charges are excluded the price per culture and the price of the special packaging.

*The special conditions when ordering Risk Group 2/3 microorganisms and/or GMO's are:*

- You must pay in advance by use of our Pro forma invoice (The Pro forma invoice will be sent after receipt of your order).
- You must complete and return our Acceptance of Responsibility form(s). (The Acceptance of Responsibility form(s) will be sent after receipt of your order)
- You must collect the package within 24 hours from the Airport of destination (when there is no door-to-door service available).
- In case of complaints about identity, non-viability or contamination, Westerdijk Institute is willing to prepare replacements however the charges for the shipment of the replacement(s) by special courier will be again for your account.

Please be aware that the ordered Risk Group 2/3 microorganism(s) and/or GMO's will be supplied active on agar slant (when possible) and is (are) well checked before shipment.

#### QUARANTINE AND DUAL USE MICROORGANISMS

Quarantine and Dual Use microorganism have to be sent by courier. Depending on the address of delivery, you will incur additional charges for the courier. These additional costs are excluded the price per culture and the price of the special packaging.

*The special conditions when ordering Quarantine and/or Dual Use Goods are:*

- You must pay in advance by use of our Pro forma invoice (The Pro forma invoice will be sent after receipt of your order).
- You must complete and return our Acceptance of Responsibility form(s). (The Acceptance of Responsibility form(s) will be sent after receipt of your order)
- In case of complaints about identity, non-viability or contamination, Westerdijk Institute is willing to prepare replacements however the charges for the shipment of the replacement(s) by special courier will be again for your account.

Quarantine or Dual Use microorganisms that are considered to be infectious substances have to be sent in accordance with ADR/IATA regulations.

Please be aware that the ordered Quarantine microorganism(s) and/or Dual Use Goods will be supplied active on agar slant (when possible) and is (are) well checked before shipment.

#### REVIVAL FROM LYOPHILIZATION

Although all cultures are checked for purity before being shipped, it is possible that a contaminant has escaped notice. Should this occur, we should appreciate being notified immediately. The contaminated cultures will be replaced by a purified culture of the same strain or with another strain of the same species if it is available.

#### COMPLAINTS

Complaints about identity, contamination or non-viability can be only accepted if they reach Westerdijk Institute within 2 months after the date of dispatch for agar cultures, or three months for lyophilized cultures, and if instructions for revival, cultivation and storage have been followed properly. Please allow sufficient time (7-10 days) for freeze-dried spores to germinate, to compensate for a possible delay.

#### IMPORT REGULATIONS

Some countries require import permits for certain species. Mailing tags for the entry of such cultures should be provided by the customer. Customers in the USA are recommended to contact the Regional Director Region II, PPQ-APHIS-USDA, American Embassy, APO New York 09159, in order to obtain permission to import cultures. It is the responsibility of the customer to check the import regulations for the species ordered. Such information can generally be obtained from the Departments of Public Health, Environment, or Agriculture. Ignoring regulations can lead to considerable delay and even penalties or damage. Hazard categories according to international or Dutch (in case of plant pathogens) regulations are indicated in the catalogue.

#### PACKING AND SHIPMENT OF INFECTIOUS MATERIAL

For the shipment of infectious material (marked in our catalogue as H2, H3, T2 or T3) special conditions are in charge, as this material has to be sent in accordance with the IATA regulations (by Air) and the ADR regulations (by Road). For the special conditions, please contact the Sales Department. Infectious material is finally packed in a special packaging and labeled according to the International Postal Union and IATA regulations. Due to the high expenses of these packaging's we have to charge Euro 15.-- per packaging excluded the shipping costs. Westerdijk Institute should be notified by the customer whose country has special regulations for packing and shipment. If vials containing infectious material (label!) are received broken or damaged, stop unpacking, put parcel at it is in a water- tight (plastic) bag and autoclave this as soon as possible. Do not return the material, but notify Westerdijk Institute about the condition of the material received. When ordering infectious material Westerdijk Institute will notify you on the special conditions and the extra charges for the shipment by special courier.

#### DISCLAIMER

Customers receiving strains from the CBS collection are responsible for their safe storage, handling and use. Neither Westerdijk Institute nor the Netherlands Academy of Arts and Sciences can consider claims or accept responsibility for damages or injuries resulting from use, storage or loss of a CBS culture. Although the identity of the strains has been checked according to present standards, Westerdijk Institute is not liable for damages arising from misidentification or misrepresentation of strains.

#### REMARKS ON THE QUALITY

Many species listed under the name of their teleomorph (perfect state) develop only the anamorph (imperfect state) in culture and are so distributed. Many organisms undergo changes during prolonged laboratory cultivation; some loose their ability to sporulate or sporulate atypically, others (e.g. biotypes and local strains of plant pathogens) loose the morphological characters originally used for their identification. We cannot therefore guarantee that specific strains will show their original cultural and morphological characters. The virulence of parasites cannot be guaranteed either, although experience has taught that it may be retained over long periods of cultivation. Many strains known to produce certain metabolites of special interest are kept in the collection. We are unable to guarantee that the cultures retain these properties. Westerdijk Institute is always grateful to receive reprints of publications arising from work on strains of CBS collection.



## Instructions for reviving freeze-dried cultures of fungi, yeasts and bacteria

*In case a material safety data sheet has been provided with the culture, read it carefully before starting to work! It is recommended to always work in a safety cabinet, and in case of pathogenic or toxigenic organisms this is compulsory!*

A freeze dried culture is supplied in a glass ampoule containing a dried pellet with the microbe. It may further contain a cotton plug, and a piece of paper with a code number or a label on the outside.

### Opening procedure

#### 1. Start - all types of cultures:

Disinfect the outer surface of the ampoule by cleaning it with 70% ethanol. Allow to dry.

Tap the ampoule gently on the work bench to loosen the freeze dried material from the glass.

In case the freeze-dried material remains adhered to the glass wall or the pellet will not crumble, aseptically pipette a little sterile water or sterile malt peptone solution into the opened ampoule and gently stir with a sterile needle if necessary.

*When breaking a glass ampoule wear something to protect your hands from cutting.*

Open the glass ampoule by scoring the glass just above the cotton plug with a glass cutter or sharp file and breaking it at the scored mark. Ampoules with flat bottom lack a cotton plug, but have a pre-scored area at the constriction.

Flame the opening and remove the cotton plug gently with a sterile forceps.

**Aseptic working and sterility are essential!**

#### 2. According to the type of organism, continue as follows:

##### Fungi (non-yeast)

Suspend the freeze-dried material by pouring the full content into a tube containing 1-2 ml of sterile water or sterile malt-peptone solution; shake gently and leave the tube at room temperature for 4-12 hrs.

Pour the suspension on a solid agar medium in a Petri dish or tube and incubate at a suitable temperature. The medium originally used is indicated on the label on the ampoule; the temperature only if room temperature (20-24 °C) is not suitable.

*Allow sufficient time (2-3 wks) for reviving of freeze-dried fungal cultures.*

##### Yeast

Suspend the freeze-dried material into 1 ml sterile water, shake gently and then pour ca. 0.5 ml of the suspension over a solid agar medium. If malt-peptone solution is used to suspend the material instead of water, the remaining suspension can be stored up to approximately two weeks for later use.

##### Bacteria

*Wildtype strains:* pour the content of the ampoule into a liquid medium, or to a tube containing a solid agar slant with 2-3 drops of sterile water. After incubation the culture can be used as inoculum for plate cultures.

*Mutants and plasmid-bearing strains:* Mutant and plasmid bearing strains should be transferred to 1 ml of a rich (non-selective) liquid medium (e.g. Luria Broth for *Escherichia coli*). Incubate this suspension for one hour at the appropriate temperature. Then add one drop of the suspension to an agar plate containing selective medium (e.g. with antibiotics) and streak for single colonies.

### Cleaning up

Before discarding, sterilize all the remains in the original ampoule.

