Final Review report for the basic substance clayed charcoal finalised in the Standing Committee on Plants, Animals, Food and Feed at its meeting on 24 January 2017 in view of the approval of clayed charcoal as basic substance in accordance with Regulation (EC) No 1107/2009

1. **Procedure followed for the evaluation process**

This review report has been established as a result of the evaluation of clayed charcoal made in the context of the assessment of the substance provided for in Article 23 of Regulation (EC) No 1107/2009 concerning the placing of plant protection products on the market, with a view to the possible approval of this substance as basic substance.

In accordance with the provisions of Article 23(3) of Regulation (EC) No 1107/2009, the Commission received on 18 May 2015 an application from Ets Christian Callegari, hereafter referred to as the applicant, for the approval of the substance clayed charcoal as basic substance.

The application and attached information were distributed to the Member States and European Food Safety Authority (EFSA) for comments. The applicant was also allowed to address collated comments and provide further information to complete the application, which was finalised in the new version of April 2016.

In accordance with the provisions of Article 23(4) of Regulation (EC) No 1107/2009 the Commission required scientific assistance on the evaluation of the application to EFSA, who delivered its views on the specific points raised in the commenting phase.

EFSA submitted to the Commission the results of its work in the form of a technical report for clayed charcoal on 6 July 2016.

The Commission examined the application, the comments by Member States and EFSA and the EFSA Technical report on the substance together with the additional information and comments provided on it by the applicant, before finalising the current draft review report, which was

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1. Does not necessarily represent the views of the Commission.
referred to the Standing Committee on Plants, Animals, Food and Feed for examination. The draft review report was finalised in the meeting of the Standing Committee of 24 January 2017.

The present review report contains the conclusions of the final examination by the Standing Committee. Given the importance of the EFSA technical report, and the comments and clarifications submitted (background document C), all these documents are also considered to be part of this review report.

2. Purposes of this review report

This review report, including the background documents and appendices thereto, has been developed in support of the Commission Implementing Regulation (EU) 2017/428 concerning the approval of clayed charcoal as basic substance under Regulation (EC) No 1107/2009.

The review report will be made available for public consultation by any interested parties.

Without prejudice to the provisions of Regulation (EC) No 178/2002, in particular with respect to the responsibility of operators, following the approval of clayed charcoal as basic substance, operators are responsible for using it for plant protection purposes in conformity with the legal provisions of Regulation (EC) No 1107/2009 and with the conditions established in the sections 4, 5 and Appendices I and II of this review report.

EFSA will make available to the public all background documents and the final Technical Report of EFSA, as well as the application without the Appendixes and excluding any information for which confidential treatment is justified in accordance with the provisions of Article 63 of Regulation (EC) No 1107/2009.

Products containing exclusively one or more basic substances do not require authorisation in line with derogation set under Article 28 of Regulation (EC) No 1107/2009. As a consequence, no further assessment will be carried out on such products. However, the Commission may review the approval of a basic substance at any time in conformity with the provisions of Article 23(6) of Regulation (EC) No 1107/2009.


The overall conclusion based on the application, including the results of the evaluation carried out with the scientific assistance of EFSA, is that there are clear indications that it may be expected that clayed charcoal fulfils the criteria of Article 23.

Clayed charcoal is a mixture of charcoal, meeting the criteria of the food additive E 153 (vegetable carbon), and bentonite, meeting the criteria of feed additive E 558, in the form of granules.

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Considering the EFSA conclusions on the basic substance application for clayed charcoal, the rate of application and the conditions of use which are described in detail in Appendix I and II, it is concluded that the use of clayed charcoal would in principle not lead to concerns for human health.

Clayed charcoal does not have an inherent capacity to cause endocrine disrupting (according to the interim criteria in Regulation 1107/2009), neurotoxic or immunotoxic effects and is not predominantly used for plant protection purposes but nevertheless is useful in plant protection. Finally, it is not placed on the market as a plant protection product.

It can be concluded that the substance has neither an immediate or delayed harmful effect on human or animal health nor an unacceptable effect on the environment when used in accordance with the supported uses as described in Appendix II.

In fact, these indications were reached within the framework of the uses which were supported by the applicant and mentioned in the list of uses supported by available data (attached as Appendix II to this review report) and therefore, they are also subject to compliance with the particular conditions and restrictions in sections 4 and 5 of this report.

Extension of the use pattern beyond those described above will require an evaluation at Community level in order to establish whether the proposed extensions of use can still satisfy the requirements of Article 23 of Regulation (EC) No 1107/2009.

4. Identity and biological properties

The main properties of clayed charcoal are given in Appendix I.


It has been established that for clayed charcoal as notified by the applicant, no relevant impurities are considered, on the basis of information currently available, of toxicological, ecotoxicological or environmental concern.

5. Particular conditions to be taken into account in relation to the uses as basic substance of clayed charcoal

Clayed charcoal must be identified by the specifications given in Appendix I and must be used in compliance with conditions of supported uses as reported in Appendixes I and II.

The following conditions for use deriving from assessment of the application have to be respected by users:

- Only uses as basic substance being a protectant are approved;

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Granules should be essentially non-dusty according to method CIPAC MT 171.1. Use of clayed charcoal must be in compliance with conditions specified in the Appendixes I and II of this review report.

On the basis of the proposed and supported uses (as listed in Appendix II), no particular issues have been identified.

6. List of studies to be generated

No further studies were identified which were at this stage considered necessary.

7. Updating of this review report

The information in this report may require to be updated from time to time to take account of technical and scientific developments as well as of the results of the examination of any information referred to the Commission in the framework of Articles 23 of Regulation (EC) No 1107/2009. Any such adaptation will be finalised in the Standing Committee on Plants, Animals, Food and Feed, as appropriate, in connection with any amendment of the approval conditions for clayed charcoal in Part C of Annex of the Regulation (EC) No 540/2011.

8. Recommended disclosure of this review report

Considering the importance of the respect of the approved conditions of use and the fact that a basic substance will be not placed on the market as plant protection product, hence, no further assessment will have to be carried out on it, it is very important to inform not only applicants but also potential users on the existence of this review report.

It is therefore recommended that the competent authorities of Member States will make available such report to the general public and operators by means of their national relevant websites and by any other appropriate form of communication to ensure that the information reaches potential users.
# APPENDIX I

## Identity and biological properties

### CLAYED CHARCOAL

<table>
<thead>
<tr>
<th><strong>Common name</strong></th>
<th>Clayed charcoal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chemical name (IUPAC)</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Chemical Name. (CA)</strong></td>
<td>Not available.</td>
</tr>
</tbody>
</table>
| **CAS No** | 7440-44-0 activated charcoal  
1333-86-4 carbon black  
1302-78-9 bentonite |
| **CIPAC No and EEC No** | 231-153-3 (EINECS) activated charcoal  
215-609-9 (EINECS) carbon black  
215-108-5 (EINECS) bentonite |
| **FAO SPECIFICATION** | Not available. |
| **Purity** | Charcoal: as in Commission Regulation (EU) No 231/2012  
Bentonite: as in Commission Regulation (EU) No 1060/2013 |
| **Molecular formula** | Not applicable. |
| **Relevant impurities** | None |
| **Molecular mass and structural formula** | C  
(Na, Ca)$_{0.3}$(Al, Mg)$_2$Si$_4$O$_{10}$(OH)$_2$nH$_2$O or  
(Na, Ca)(Al, Mg)$_6$(Si$_4$O$_{10}$)$_3$(OH)$_6$nH$_2$O or  
Si$_4$(Al$_{(2-x)}$R$_x$)(O$_{10-}$H$_2$O)(Ce$_x$nH$_2$O) or  
Si$_4$(Al$_{(2-x)}$R$_x$)(H$_2$O)$_n$  
where:  
R = Mg, Fe, Mn, Zn, Ni  
Ce (cations exchangeable) = Ca, Na, Mg |
| **Mode of Use** | Soil burying |
| **Preparation to be used** | Granule (GR) |
| **Function of plant protection** | Protectant |

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## APPENDIX II
### CLAYED CHARCOAL

<table>
<thead>
<tr>
<th>Crop and/or situation (a)</th>
<th>Pests or group of pests controlled (c)</th>
<th>Formulation</th>
<th>Application</th>
<th>Application rate</th>
<th>PHI (days)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>F</strong> Grapevine <em>Vitis vinifera</em>*</td>
<td>ESCA (Black Measles) Caused by a complex of fungi that includes several species of <em>Phaeoacremonium</em> primarily by <em>Phaeoacremonium aleophilium</em>, (Pal) (currently known by the name of its sexual stage, <em>Togninia minima</em>), and by <em>Phaeomoniella chlamydospora</em> (Pch)</td>
<td>GR*</td>
<td>Soil burying</td>
<td>1**</td>
<td>-</td>
<td>500</td>
</tr>
</tbody>
</table>

* Granules should be essentially non-dusty according to method CIPAC MT 171.1
** Every 3 years

- (a) For crops, the EU and Codex classification (both) should be taken into account; where relevant, the use situation should be described (e.g. fumigation of a structure)
- (b) Outdoor or field use (F), greenhouse application (G) or indoor application (I)
- (c) e.g. pests as biting and sucking insects, soil born insects, foliar fungi, weeds or plant elicitor
- (d) e.g. wettable powder (WP), emulsifiable concentrate (EC), granule (GR) etc.
- (e) GCPC Codes – GIFAP Technical Monograph N° 2, 1989
- (f) All abbreviations used must be explained
- (g) Method, e.g. high volume spraying, low volume spraying, spreading, dusting, drench
- (h) Kind, e.g. overall, broadcast, aerial spraying, row, individual plant, between the plant – type of equipment used must be indicated
- (i) g/kg or g/L. Normally the rate should be given for the substance (according to ISO)
- (j) Growth stage at last treatment (BBCH Monograph, Growth Stages of Plants, 1997, Blackwell, ISBN 3-8263-3152-4), including where relevant, information on season at time of application
- (k) Indicate the minimum and maximum number of application possible under practical conditions of use
- (l) The values should be given in g or kg whatever gives the more manageable number (e.g. 200 kg/ha instead of 200 000 g/ha or 12.5 g/ha instead of 0.0125 kg/ha
- (m) PHI – minimum pre-harvest interval