



SCIENTIFIC PANEL ON FOOD ADDITIVES AND FLAVOURINGS

MINUTES OF THE 17th MEETING OF THE WORKING GROUP ON TITANIUM DIOXIDE (E 171) AS A FOOD ADDITIVE

Held on 2nd and 3rd March 2021 (Webconference)

(Agreed on 3 March 2021)

Participants

■ Working Group Members:

Emanuela Corsini, Francesco Cubadda, Didima De Groot, Rex FitzGerald, Arno Christian Gutleb, Ursula Gundert-Remy, Jan Mast, Alicja Mortensen, Agnes Oomen, Sabina Passamonti, Veronika Plichta, Aldert Piersma, Beate Ulbrich, Henk Van Loveren, Dina Waalkens-Berendsen and Matthew Wright (Chair).

■ EFSA:

FIP Unit: Stefania Barmaz, Maria Carfi, Consuelo Civitella, Esraa Elewa, Galvin Eyong, Alessandra Giarola, Ana Maria Rincon, Camilla Smeraldi.

SCER Unit: Jose Tarazona

■ Observers:

European Chemicals Agency (ECHA): Ari Karjalainen

European Medicines Agency (EMA): Stefano Ponzano

1. Welcome and apologies for absence

The chair welcomed the participants.

Apologies were received from Sara Gunnare.

2. Adoption of agenda

The agenda was adopted without changes.



3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence¹ and the Decision of the Executive Director on Competing Interest Management², EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Scientific topic for discussion

4.1 Assessment of the safety of titanium dioxide (E 171) (EFSA-Q-2020-00262)

The working group had a general discussion on the scientific evidence for the assessment of the food additive.

5. AOB

An additional working group meeting will be scheduled in March 2021.

6. Agreement of the minutes of the 17th Working Group meeting held on 2nd and 3rd March 2021

The minutes were agreed.

¹ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



Food Ingredients and Packaging Unit

SCIENTIFIC PANEL ON FOOD ADDITIVES AND FLAVOURINGS

MINUTES OF THE 16th MEETING OF THE WORKING GROUP ON TITANIUM DIOXIDE (E 171) AS A FOOD ADDITIVE

Held on 17 February 2021 (Webconference)

(Agreed on 17 February 2021)

Participants

■ Working Group Members:

Emanuela Corsini, Francesco Cubadda, Didima De Groot, Rex FitzGerald, Arno Christian Gutleb, Ursula Gundert-Remy, Jan Mast, Alicja Mortensen, Agnes Oomen, Sabina Passamonti, Veronika Plichta, Beate Ulbrich, Dina Waalkens-Berendsen, Matthew Wright (Chair).

■ EFSA:

FIP Unit: Stefania Barmaz, Maria Carfi, Consuelo Civitella, Esraa Elewa, Galvin Eyong, Alessandra Giarola, Ana Maria Rincon, Camilla Smerald.

1. Welcome and apologies for absence

The chair welcomed the participants.

Apologies were received from Sara Gunnare, Aldert Piersma and Henk Van Loveren.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members



In accordance with EFSA's Policy on Independence¹ and the Decision of the Executive Director on Competing Interest Management², EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Scientific topic for discussion

4.1 Assessment of the safety of titanium dioxide (E 171) (EFSA-Q-2020-00262)

The working group had a general discussion on the scientific evidence for the assessment of the food additive.

5. Any Other Business

The working group agreed to have a next working group session on the 2nd and 3rd of March 2021.

6. Agreement of the minutes of the 16th Working Group meeting held on 17 February 2021

The minutes were agreed.

¹ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



Food Ingredients and Packaging Unit

SCIENTIFIC PANEL ON FOOD ADDITIVES AND FLAVOURINGS

MINUTES OF THE 15th MEETING OF THE WORKING GROUP ON TITANIUM DIOXIDE (E 171) AS A FOOD ADDITIVE

Held on 1st and 2nd February 2021 (Webconference)

(Agreed on 2 February 2021)

Participants

■ Working Group Members:

Emanuela Corsini, Francesco Cubadda, Didima De Groot, Rex FitzGerald, Arno Christian Gutleb, Ursula Gundert-Remy, Sara Gunnare, Jan Mast, Alicja Mortensen, Agnes Oomen, Sabina Passamonti, Aldert Piersma, Veronika Plichta, Beate Ulbrich, Henk Van Loveren, Dina Waalkens-Berendsen, Matthew Wright (Chair).

■ EFSA:

FIP Unit: Stefania Barmaz, Consuelo Civitella, Esraa Elewa, Galvin Eyong, Alessandra Giarola, Ana Maria Rincon, Camilla Smerald.

SCER Unit: Jose Tarazona

1. Welcome and apologies for absence

The chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members



In accordance with EFSA's Policy on Independence¹ and the Decision of the Executive Director on Competing Interest Management², EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Scientific topic for discussion

4.1 Assessment of the safety of titanium dioxide (E 171) (EFSA-Q-2020-00262)

The working group discussed the scientific evidence retrieved from the literature search.

5. Any Other Business

The working group agreed to have an additional meeting around middle of February 2021.

6. Agreement of the minutes of the 15th Working Group meeting held on 1st and 2nd February 2021

The minutes were agreed.

¹ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



SCIENTIFIC PANEL ON FOOD ADDITIVES AND FLAVOURINGS

MINUTES OF THE 14th MEETING OF THE WORKING GROUP ON TITANIUM DIOXIDE (E 171) AS A FOOD ADDITIVE

Held on 20th January 2021 (Webconference)

(Agreed on 20 January 2021)

Participants

■ Working Group Members:

Emanuela Corsini, Francesco Cubadda, Didima De Groot, Rex FitzGerald, Arno Christian Gutleb, Ursula Gundert-Remy, Sara Gunnare, Jan Mast, Alicja Mortensen, Agnes Oomen, Sabina Passamonti, Veronika Plichta, Beate Ulbrich, Henk Van Loveren, Dina Waalkens-Berendsen, Matthew Wright (Chair).

■ EFSA:

FIP Unit: Stefania Barmaz, Maria Carfi, Consuelo Civitella, Esraa Elewa, Galvin Eyong, Alessandra Giarola, Ana Maria Rincon, Camilla Smerald.

SCER Unit: Jose Tarazona

FEED Unit: Vittoria Maria Vettori

1. Welcome and apologies for absence

The chair welcomed the participants.

Apologies were received from Aldert Piersma.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members



In accordance with EFSA's Policy on Independence¹ and the Decision of the Executive Director on Competing Interest Management², EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Scientific topic for discussion

4.1 Assessment of the safety of titanium dioxide (E 171) (EFSA-Q-2020-00262)

The working group discussed the toxicokinetic studies identified in the literature search and considered reliable for assessment. The assessment of the EOGRT study and evaluation of toxicological studies took place.

5. Any Other Business

The working group agreed to have the next WG meeting on 1st and 2nd of February 2021.

6. Agreement of the minutes of the 14th Working Group meeting held on 20th January 2021

The minutes were agreed.

¹ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



SCIENTIFIC PANEL ON FOOD ADDITIVES AND FLAVOURINGS

MINUTES OF THE 13th MEETING OF THE WORKING GROUP ON TITANIUM DIOXIDE (E 171) AS A FOOD ADDITIVE

Held on 12th and 14th January 2021 (Webconference)

(Agreed on 14 January 2021)

Participants

■ Working Group Members:

Emanuela Corsini, Francesco Cubadda, Didima De Groot, Rex FitzGerald, Arno Christian Gutleb, Ursula Gundert-Remy, Jan Mast, Alicja Mortensen, Agnes Oomen, Sabina Passamonti, Aldert Piersma, Veronika Plichta, Beate Ulbrich, Henk Van Loveren, Dina Waalkens-Berendsen, Matthew Wright (Chair).

■ Hearing Experts:

Laurence Castle¹, Maria Jose Frutos Fernandez¹, Wim Mennes¹, Maged Younes¹.

■ EFSA:

FIP Unit: Stefania Barmaz, Consuelo Civitella, Galvin Eyong, Alessandra Giarola, Claudia Roncancio-Pena¹, Ana Maria Rincon, Camilla Smerald.

SCER Unit: Reinhilde Schoonjans, Jose Tarazona,

■ Observer:

Ari Karjalainen¹

1. Welcome and apologies for absence

The chair welcomed the participants.

Apologies were received from Sara Gunnare.

¹ Participated on 12.01.2021

² Participated on 14.01.2021



2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence¹ and the Decision of the Executive Director on Competing Interest Management², EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Scientific topic for discussion

4.1 Assessment of the safety of titanium dioxide (E 171) (EFSA-Q-2020-00262)

The working group discussed toxicological studies identified in the literature search and considered reliable for assessment.

5. Any Other Business

The working group agreed to organise an additional meeting on 20th January 2021.

6. Agreement of the minutes of the 13th Working Group meeting held on 12th and 14th January 2021

The minutes were agreed.

¹ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



Food Ingredients and Packaging Unit

SCIENTIFIC PANEL ON FOOD ADDITIVES AND FLAVOURINGS

MINUTES OF THE 12th MEETING OF THE WORKING GROUP ON TITANIUM DIOXIDE (E 171) AS A FOOD ADDITIVE

Held on 18th December 2020 (Webconference)

(Agreed on 18 December 2020)

Participants

- EFSA's expert:
Jan Mast
- Hearing experts (ANSES):
Bruno Teste, Marie-Helene Ropers
- EFSA:
FIP Unit: Galvin Eyong, Ana Maria Rincon, Camilla Smeraldi, Alexandra Tard.

1. Welcome and apologies for absence

EFSA welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence¹ and the Decision of the Executive Director on Competing Interest Management², EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the

¹ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Scientific topic for discussion

4.1 Assessment of the safety of titanium dioxide (E 171) (EFSA-Q-2020-00262)

The working group discussed on the approach used by EFSA and ANSES to calculate the mass percentage of nanoparticles in E171. Information on the available data for the exposure estimate to E171 was also discussed.

5. Any Other Business

None.

6. Agreement of the minutes of the 12th Working Group meeting held on 18.12.2020

The minutes were agreed.

SCIENTIFIC PANEL ON FOOD ADDITIVES AND FLAVOURINGS

MINUTES OF THE 11th MEETING OF THE WORKING GROUP ON TITANIUM DIOXIDE (E 171) AS A FOOD ADDITIVE

Held on 14th December 2020 (Webconference)

(Agreed on 14 December 2020)

Participants

■ Working Group Members:

Emanuela Corsini, Francesco Cubadda, Didima De Groot, Rex FitzGerald, Arno Christian Gutleb, Ursula Gundert-Remy, Sara Gunnare, Jan Mast, Alicja Mortensen, Agnes Oomen, Sabina Passamonti, Aldert Piersma, Veronika Plichta, Beate Ulbrich, Henk Van Loveren, Dina Waalkens-Berendsen, Matthew Wright (Chair).

■ EFSA:

FIP Unit: Stefania Barmaz, Mari Carfi, Consuelo Civitella, Esraa Elewa, Galvin Eyong, Alessandra Giarola, Ana Maria Rincon, Camilla Smeraldi.

1. Welcome and apologies for absence

The chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence¹ and the Decision of the Executive Director on Competing Interest Management², EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the

¹ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Scientific topic for discussion

4.1 Assessment of the safety of titanium dioxide (E 171) (EFSA-Q-2020-00262)

The working group discussed the draft assessment of the toxicokinetics of titanium dioxide. Further assessment of the EOGRT study with E171 and new scientific evidence, relevant for the assessment of the food additive, took place.

5. Any Other Business

None.

6. Agreement of the minutes of the 11th Working Group meeting held on 14.12.2020

The minutes were agreed.



SCIENTIFIC PANEL ON FOOD ADDITIVES AND FLAVOURINGS

MINUTES OF THE 10th MEETING OF THE WORKING GROUP ON TITANIUM DIOXIDE (E 171) AS A FOOD ADDITIVE

Held on 11th December 2020 (Webconference)

(Agreed on 11 December 2020)

Participants

■ Working Group Members:

Emanuela Corsini, Didima De Groot, Rex FitzGerald, Alicja Mortensen, Agnes Oomen, Aldert Piersma, Beate Ulbrich, Henk Van Loveren, Dina Waalkens-Berendsen, Matthew Wright (Chair).

■ EFSA:

FIP Unit: Stefania Barmaz, Mari Carfi, Consuelo Civitella, Esraa Elewa, Galvin Eyong, Alessandra Giarola, Ana Maria Rincon, Camilla Smeraldi.

1. Welcome and apologies for absence

The chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence¹ and the Decision of the Executive Director on Competing Interest Management², EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the

¹ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Scientific topic for discussion

4.1 Assessment of the safety of titanium dioxide (E 171) (EFSA-Q-2020-00262)

The Working Group prepared the draft assessment of the EOGRT study.

5. Any Other Business

None.

6. Agreement of the minutes of the 10th Working Group meeting held on 11.12.2020

The minutes were agreed.



Food Ingredients and Packaging Unit

SCIENTIFIC PANEL ON FOOD ADDITIVES AND FLAVOURINGS

MINUTES OF THE 9th MEETING OF THE WORKING GROUP ON TITANIUM DIOXIDE (E 171) AS A FOOD ADDITIVE

Held on 4th December 2020 (Webconference)

(Agreed on 4 December 2020)

Participants

■ Working Group Members:

Emanuela Corsini, Francesco Cubadda, Didima De Groot, Rex FitzGerald, Arno Christian Gutleb, Ursula Gundert-Remy, Jan Mast, Alicja Mortensen, Agnes Oomen, Sabina Passamonti, Aldert Piersma, Veronika Plichta, Beate Ulbrich, Henk Van Loveren, Dina Waalkens-Berendsen, Matthew Wright (Chair).

■ EFSA:

FIP Unit: Stefania Barmaz, Mari Carfi, Consuelo Civitella, Esraa Elewa, Galvin Eyong, Alessandra Giarola, Ana Maria Rincon, Camilla Smeraldi.

SCER Unit: Jose Tarazona

1. Welcome and apologies for absence

The chair welcomed the participants.

Apologies were received from Sara Gunnare.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members



In accordance with EFSA's Policy on Independence¹ and the Decision of the Executive Director on Competing Interest Management², EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Scientific topic for discussion

4.1 Assessment of the safety of titanium dioxide (E 171) (EFSA-Q-2020-00262)

The Working Group prepared the draft assessment of the EOGRT study and identified the need to request an additional clarification.

In addition, the Working Group proceeded with the assessment of the publications retrieved in the literature search.

5. Any Other Business

None.

6. Agreement of the minutes of the 9th Working Group meeting held on 4.12.2020

The minutes were agreed.

¹ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



SCIENTIFIC PANEL ON FOOD ADDITIVES AND FLAVOURINGS

MINUTES OF THE 8th MEETING OF THE WORKING GROUP ON TITANIUM DIOXIDE (E 171) AS A FOOD ADDITIVE

Held on 30th November 2020 (Webconference)

(Agreed on 30 November 2020)

Participants

■ Working Group Members:

Emanuela Corsini, Francesco Cubadda, Didima De Groot, Rex FitzGerald, Arno Christian Gutleb, Ursula Gundert-Remy, Jan Mast, Alicja Mortensen, Agnes Oomen, Sabina Passamonti, Aldert Piersma, Veronika Plichta, Beate Ulbrich, Henk Van Loveren, Dina Waalkens-Berendsen, Matthew Wright (Chair).

■ EFSA:

FIP Unit: Stefania Barmaz, Consuelo Civitella, Galvin Eyong, Alessandra Giarola, Ana Maria Rincon, Camilla Smeraldi.

SCER Unit: Jose Tarazona

■ Observer:

Ari Karjalainen

1. Welcome and apologies for absence

The chair welcomed the participants.

Apologies were received from Sara Gunnare.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members



In accordance with EFSA's Policy on Independence¹ and the Decision of the Executive Director on Competing Interest Management², EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Scientific topic for discussion

4.1 Assessment of the safety of titanium dioxide (E 171) (EFSA-Q-2020-00262)

The working group discussed the assessment of scientific evidences retrieved in the literature search and considered as relevant and reliable for the assessment of E171.

5. Any Other Business

None.

6. Agreement of the minutes of the 8th Working Group meeting held on 30.11.2020

The minutes were agreed.

¹ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



Food Ingredients and Packaging Unit

SCIENTIFIC PANEL ON FOOD ADDITIVES AND FLAVOURINGS

MINUTES OF THE 7th MEETING OF THE WORKING GROUP ON TITANIUM DIOXIDE (E 171) AS A FOOD ADDITIVE

Held on 3rd and 4th November 2020 (Webconference)

(Agreed on 4 November 2020)

Participants

■ Working Group Members:

Emanuela Corsini, Francesco Cubadda, Didima De Groot, Rex FitzGerald, Arno Christian Gutleb, Ursula Gundert-Remy, Jan Mast, Alicja Mortensen, Agnes Oomen, Sabina Passamonti, Aldert Piersma, Veronika Plichta, Beate Ulbrich, Henk Van Loveren, Dina Waalkens-Berendsen, Matthew Wright (Chair).

■ EFSA:

FIP Unit: Stefania Barmaz, Consuelo Civitella, Galvin Eyong, Alessandra Giarola, Ana Maria Rincon, Camilla Smeraldi.

SCER Unit: Jose Tarazona

1. Welcome and apologies for absence

The chair welcomed the participants.

Apologies were received from Sara Gunnare.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members



In accordance with EFSA's Policy on Independence¹ and the Decision of the Executive Director on Competing Interest Management², EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Scientific topic for discussion

4.1 Assessment of the safety of titanium dioxide (E 171) (EFSA-Q-2020-00262)

The working group discussed the initial appraisal of the reliability of some of the papers retrieved from the literature search and considered to be relevant for the assessment of the toxicity of this kind of material that contains a fraction of nanoparticles. The specific criteria used for appraising the reliability of the studies were discussed and agreed among the WG members for their consistent implementation across the body of evidence that will be reviewed under the current mandate.

5. Any Other Business

None.

6. Agreement of the minutes of the 7th Working Group meeting held on 3 - 4.11.2020

The minutes were agreed.

¹ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

SCIENTIFIC PANEL ON FOOD ADDITIVES AND FLAVOURINGS

MINUTES OF THE 6th MEETING OF THE WORKING GROUP ON TITANIUM DIOXIDE (E 171) AS A FOOD ADDITIVE

Held on 19 October 2020 (Webconference)

(Agreed on 19 October 2020)

Participants

■ Working Group Members:

Emanuela Corsini, Didima De Groot, Rex FitzGerald, Beate Ulbrich, Henk Van Loveren, Dina Waalkens-Berendsen and Matthew Wright (Chair).

■ EFSA:

FIP Unit: Stefania Barmaz, Consuelo Civitella, Galvin Eyong, Alessandra Giarola, Ana Maria Rincon, Camilla Smeraldi.

1. Welcome and apologies for absence

The chair welcomed the participants.

Apologies were received from Aldert Piersma and Alicja Mortensen.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence¹ and the Decision of the Executive Director on Competing Interest Management², EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the

¹ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Scientific topic for discussion

4.1 Assessment of the safety of titanium dioxide (E 171) (EFSA-Q-2020-00262)

The working group discussed the final interim report of the EOGRT study and complementary reports of the study and a draft assessment was prepared. The WG considered that some additional clarifications should be requested in addition to those already asked for.

5. Any Other Business

None.

6. Agreement of the minutes of the 6th Working Group meeting held on 19.10.2020

The minutes were agreed.

SCIENTIFIC PANEL ON FOOD ADDITIVES AND FLAVOURINGS

MINUTES OF THE 5th MEETING OF THE WORKING GROUP ON TITANIUM DIOXIDE (E 171) AS A FOOD ADDITIVE

Held on 01 – 02 October 2020 (Webconference)

(Agreed on 02 October 2020)

Participants

■ Working Group Members:

Emanuela Corsini, Francesco Cubadda,¹ Didima De Groot, Rex FitzGerald, Arno Christian Gutleb,¹ Ursula Gundert-Remy,¹ Sara Gunnare,¹ Jan Mast,¹ Alicja Mortensen,² Agnes Oomen,¹ Sabina Passamonti,¹ Aldert Piersma, Veronika Plichta,¹ Beate Ulbrich, Henk Van Loveren, Dina Waalkens-Berendsen, Matthew Wright (Chair).

■ EFSA:

FIP Unit: Stefania Barmaz, Maria Carfi, Consuelo Civitella, Esraa Elewa, Galvin Eyong, Alessandra Giarola, Ana Maria Rincon, Camilla Smeraldi, Alexandra Tard.

SCER Unit: Jose Tarazona.

■ Observer

ECHA: Ari Karjalainen

1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

¹ Participated on 1.10.2020

² Participated on 2.10.2020



In accordance with EFSA's Policy on Independence³ and the Decision of the Executive Director on Competing Interest Management⁴, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Scientific topic for discussion

4.1 Assessment of the safety of titanium dioxide (E 171) (EFSA-Q-2020-00262)

The working group agreed to use a tiered approach to evaluate the impact of the relevant biological and toxicological in vivo studies on the assessment of titanium dioxide (E171) that will take into account specific elements to be considered for the testing of materials that contain a percentage of nanoparticles.

Information related to the exposure assessment of the food additive E 171 was presented to the working group. The working group also evaluated the EOGRT study and complementary reports submitted to EFSA in response to European Commission follow-up call on titanium dioxide (E 171). Tasks were distributed to the experts

5. Any Other Business

A short presentation by a working group member on a recent publication⁵ took place.

6. Agreement of the minutes of the 5th Working Group meeting held on 1-2.10.2020

The minutes were agreed.

³ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

⁴ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

⁵ Brans W, Peters RJB, Braakhuis HM, Maślankiewicz L and Oomen AG, 2020. Possible effects of titanium dioxide particles on human liver, intestinal tissue, spleen and kidney after oral exposure. *Nanotoxicology*, 14, 7, 985-1007.



Food Ingredients and Packaging Unit

SCIENTIFIC PANEL ON FOOD ADDITIVES AND FLAVOURINGS

MINUTES OF THE 4th MEETING OF THE WORKING GROUP ON TITANIUM DIOXIDE (E 171) AS A FOOD ADDITIVE

Held on 28 September 2020 (Webconference)

(Agreed on 28 September 2020)

Participants

■ Working Group Members:

Emanuela Corsini, Francesco Cubadda, Didima De Groot, Rex FitzGerald, Arno Christian Gutleb, Ursula Gundert-Remy, Sara Gunnare, Jan Mast, Alicja Mortensen, Agnes Oomen, Sabina Passamonti, Aldert Piersma, Veronika Plichta, Beate Ulbrich, Dina Waalkens-Berendsen, Matthew Wright (Chair).

■ EFSA:

FIP Unit: Consuelo Civitella, Galvin Eyong, Alessandra Giarola, Ana Maria Rincon, Camilla Smeraldi.

■ SCER Unit: Jose Tarazona.

1. Welcome and apologies for absence

The Chair welcomed the participants. Apologies were received from Henk Van Loveren.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members



In accordance with EFSA's Policy on Independence¹ and the Decision of the Executive Director on Competing Interest Management², EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Notes from Working Group meeting on 4.09.2020 and 17.09.2020

The notes and the action points were checked

5. Scientific topic for discussion

5.1 Assessment of the safety of titanium dioxide (E 171) (EFSA-Q-2020-00262)

The working group discussed the approach to be followed for the appraisal of the reliability of toxicity studies retrieved by a literature search.

6. Any Other Business

None.

7. Agreement of the minutes of the 4th Working Group meeting held on 28.09.2020

The minutes were agreed.

¹ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



Food Ingredients and Packaging Unit

SCIENTIFIC PANEL ON FOOD ADDITIVES AND FLAVOURINGS

MINUTES OF THE 3rd MEETING OF THE WORKING GROUP ON TITANIUM DIOXIDE (E 171) AS A FOOD ADDITIVE

Held on 17 September 2020 (Webconference)

(Agreed on 17 September 2020)

Participants

■ Working Group Members:

Emanuela Corsini, Didima De Groot, Rex FitzGerald, Aldert Piersma, Beate Ulbrich, Henk Van Loveren, Dina Waalkens-Berendsen and Matthew Wright (Chair).

■ EFSA:

FIP Unit: Consuelo Civitella, Galvin Eyong, Ana Maria Rincon, Camilla Smeraldi.

1. Welcome and apologies for absence

No apologies.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence¹ and the Decision of the Executive Director on Competing Interest Management², EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

¹ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



4. Scientific topic for discussion

4.1 Assessment of the safety of titanium dioxide (E 171) (EFSA-Q-2020-00262)

The working group discussed the final interim report of the EOGRT study and complementary reports of the study. The WG considered that additional clarifications should be requested.

5. Any Other Business

None.

6. Agreement of the minutes of the 3rd Working Group meeting held on 17.09.2020

The minutes were agreed.

SCIENTIFIC PANEL ON FOOD ADDITIVES AND FLAVOURINGS

MINUTES OF THE 2nd MEETING OF THE WORKING GROUP ON TITANIUM DIOXIDE (E 171) AS A FOOD ADDITIVE

Held on 04 September 2020 (Webconference)

(Agreed on 04 September 2020)

Participants

■ Working Group Members:

Emanuela Corsini, Francesco Cubadda, Didima De Groot, Rex FitzGerald, Arno Christian Gutleb, Ursula Gundert-Remy, Sara Gunnare, Jan Mast, Alicja Mortensen, Agnes Oomen, Sabina Passamonti, Aldert Piersma, Veronika Plichta, Beate Ulbrich, Henk Van Loveren, Dina Waalkens-Berendsen, Mathew Wright (Chair).

■ EFSA:

FIP Unit: Ana Campos, Esraa Elewa, Galvin Eyong, Alessandra Giarola, Ana Maria Rincon, Camilla Smeraldi.

SCER Unit: Jose Tarazona.

1. Welcome and apologies for absence

The Chair welcomed the participants.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence¹ and the Decision of the Executive Director on Competing Interest Management², EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of

¹ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf



Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Scientific topic for discussion

4.1 Assessment of the safety of titanium dioxide (E 171) (EFSA-Q-2020-00262)

Feedback on the appraisal of the relevance of toxicity studies retrieved in the literature search was presented. The Working Group discussed the criteria be used for the appraisal of the reliability of the toxicity studies. The approach was discussed, and tasks were distributed to the experts.

5. Any Other Business

The planning for the next working group meetings was discussed.

6. Agreement of the minutes of the 2nd Working Group meeting held on 04.09.2020

The minutes were agreed.



SCIENTIFIC PANEL ON FOOD ADDITIVES AND FLAVOURINGS

MINUTES OF THE 1st MEETING OF THE WORKING GROUP ON TITANIUM DIOXIDE (E 171) AS A FOOD ADDITIVE

Held on 28 July 2020 (Webconference)

(Agreed on 28 July 2020)

Participants

■ Working Group Members:

Emanuela Corsini, Francesco Cubadda, Didima De Groot, Rex FitzGerald, Arno Christian Gutleb, Ursula Gundert-Remy, Sara Gunnare, Alicja Mortensen, Agnes Oomen, Sabina Passamonti, Aldert Piersma, Veronika Plichta, Beate Ulbrich, Henk Van Loveren, Dina Waalkens-Berendsen, Mathew Wright (Chair).

■ EFSA:

FIP Unit: Ana Campos, Maria Carfi, Esraa Elewa, Galvin Eyong, Alessandra Giarola, Ana Maria Rincon, Camilla Smeraldi, Giorgia Vianello.

SCER Unit: Maria Chiara Astuto, Jose Tarazona.

■ Observer:

Ari Karjalainen

1. Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from Jan Mast.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members



In accordance with EFSA's Policy on Independence¹ and the Decision of the Executive Director on Competing Interest Management², EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Scientific topic for discussion

4.1 Assessment of the safety of titanium dioxide (E 171) (EFSA-Q-2020-00262)

The mandate from the European Commission, the advice received from the EFSA ccWorking Group Nanotechnology for the assessment of titanium dioxide (E171), the approach that was followed for the literature search and the available toxicological database were presented to the Working Group. Further, the Working Group discussed the approaches that could be used for the relevance of the toxicity studies. An approach was agreed, and tasks were distributed to the experts.

5. Any Other Business

A short presentation on the organisation of the working documents was introduced.

6. Agreement of the minutes of the 1st Working Group meeting held on 28.07.2020

The minutes were agreed.

¹ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf