

# Statement on Regulation (EU) No 517/2014 on Fluorinated Greenhouse Gases



The objective of Regulation (EU) No 517/2014 is to protect the environment by reducing emissions of fluorinated greenhouse gases.

Three main regulatory approaches aim to reduce fluorinated greenhouse gas emissions:

1. Introduction of a gradual phase-down of the quantities of hydrofluorocarbons (HFCs) available on the market to one-fifth of current levels by 2030
2. Prohibitions on use and placement on the market, insofar as technically feasible and more climate friendly alternatives are available
3. Continuation and expansion of the scope of regulations concerning leak tests, certification, disposal and labelling

Article 2(1) of Regulation (EU) No 517/2014 defines Fluorinated Greenhouse Gases as “hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride and other greenhouse gases that contain fluorine, listed in Annex I (of (EU) No 517/2014), or mixtures containing any of those substances.”

To the best of our knowledge the products of Covestro Deutschland AG do not intentionally contain the following Fluorinated Greenhouse Gases (as listed in Annex I of Regulation (EU) No 517/2014) and therefore these substances are not expected to be present above limit values, if applicable. The presence of analytically detectable traces, which have possibly been introduced via raw materials, auxiliaries and additives, cannot be excluded. Specific analyses to measure such traces have not been performed on raw materials or final products.

## Annex I, Section 1: Hydrofluorocarbons (HFCs)

HFC-23	trifluoromethane (fluoroform)	CHF <sub>3</sub>
HFC-32	difluoromethane	CH <sub>2</sub> F <sub>2</sub>
HFC-41	fluoromethane (methyl fluoride)	CH <sub>3</sub> F
HFC-125	pentafluoroethane	CHF <sub>2</sub> CF <sub>3</sub>
HFC-134	1,1,2,2-tetrafluoroethane	CHF <sub>2</sub> CHF <sub>2</sub>
HFC-134a	1,1,1,2-tetrafluoroethane	CH <sub>2</sub> FCF <sub>3</sub>
HFC-143	1,1,2-trifluoroethane	CH <sub>2</sub> FCHF <sub>2</sub>
HFC-143a	1,1,1-trifluoroethane	CH <sub>3</sub> CF <sub>3</sub>
HFC-152	1,2-difluoroethane	CH <sub>2</sub> FCH <sub>2</sub> F
HFC-152a	1,1-difluoroethane	CH <sub>3</sub> CHF <sub>2</sub>
HFC-161	fluoroethane (ethyl fluoride)	H <sub>3</sub> CH <sub>2</sub> F
HFC-227ea	1,1,1,2,3,3,3-heptafluoropropane	CF <sub>3</sub> CHF <sub>2</sub> CF <sub>3</sub>
HFC-236cb	1,1,1,2,2,3-hexafluoropropane	CH <sub>2</sub> FCF <sub>2</sub> CF <sub>3</sub>
HFC-236ea	1,1,1,2,3,3-hexafluoropropane	CHF <sub>2</sub> CHF <sub>2</sub> CF <sub>3</sub>
HFC-236fa	1,1,1,3,3,3-hexafluoropropane	CF <sub>3</sub> CH <sub>2</sub> CF <sub>3</sub>
HFC-245ca	1,1,2,2,3-pentafluoropropane	CH <sub>2</sub> FCF <sub>2</sub> CHF <sub>2</sub>
HFC-245fa	1,1,1,3,3-pentafluoropropane	CHF <sub>2</sub> CH <sub>2</sub> CF <sub>3</sub>
HFC-365 mfc	1,1,1,3,3-pentafluorobutane	CF <sub>3</sub> CH <sub>2</sub> CF <sub>2</sub> CH <sub>3</sub>
HFC-43-10 mee	1,1,1,2,2,3,4,5,5,5-decafluoropentane	CF <sub>3</sub> CHF <sub>2</sub> CF <sub>2</sub> CF <sub>3</sub>

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## Annex I, Section 2: Perfluorocarbons (PFCs)

PFC-14	tetrafluoromethane (perfluoromethane, carbon tetrafluoride)	CF4
PFC-116	hexafluoroethane (perfluoroethane)	C2F6
PFC-218	octafluoropropane (perfluoropropane)	C3F8
PFC-3-1-10 (R-31-10)	decafluorobutane (perfluorobutane)	C4F10
PFC-4-1-12 (R-41-12)	dodecafluoropentane (perfluoropentane)	C5F12
PFC-5-1-14 (R-51-14)	tetradecafluorohexane (perfluorohexane)	C6F14
PFC-c-318	octafluorocyclobutane (perfluorocyclobutane)	c-C4F8

## Annex I, Section 3: Other perfluorinated compounds

sulphur hexafluoride	SF6
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### Exemptions:

Some BAYDUR, BAYFIT, BAYFLEX, BAYMER, BAYSAFE, BAYTHERM and BAYSEAL polyol mixtures contain fluorinated blowing agents. In these cases, the content of fluorinated blowing agents is always above 0,1% and their presence is indicated in section 3 "Composition" of the Covestro Safety Data Sheet issued for products marketed by Covestro Deutschland AG and its affiliates in member states of the European Union or the European Economic Area.

Annex II of Regulation (EU) No 517/2014 is listing 'other fluorinated greenhouse gases subject to reporting in accordance with article 19'. These substances are unsaturated hydro(chloro)fluorocarbons (e.g. HFC-1234yf), fluorinated ethers and alcohols (e.g. HFE-125), and other perfluorinated compounds (e.g. nitrogen trifluoride).

Additionally, Regulation (EU) No 517/2014 phased out some specific applications of Fluorinated Greenhouse Gases according to Annex III in the past. Among others, the following applications may be of relevance for your business; deadline in brackets:

4. Windows for domestic use that contain fluorinated greenhouse gases (2007)
  5. Other windows that contain fluorinated greenhouse gases (2008)
  6. Footwear that contains fluorinated greenhouse gases (2006)
  7. Tyres that contain fluorinated greenhouse gases (2007)
  8. One-component foams, except when required to meet national safety standards, that contain fluorinated greenhouse gases with GWP of 150 or more (2008)
  10. Domestic refrigerators and freezers that contain HFCs with GWP of 150 or more (2015)
  11. Refrigerators and freezers for commercial use (2020/2022)
  16. Foams that contain HFCs with GWP of 150 or more except when required to meet national safety standards: Other foams than extruded polystyrene (XPS) (2023)
- Further applications have restrictions, please review the EU regulation for further details.

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*Version 4. The information contained herein is believed to be accurate as of the date of this document. If any of the above mentioned regulations change after the date of declaration, this information is no longer valid.*

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**Covestro Deutschland AG**  
D-51365 Leverkusen, Germany  
Global Product Safety & Regulatory Affairs

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*Board of management: Dr. Markus Steilemann (chairman), Sucheta Govil, Dr. Klaus Schäfer, Dr. Thomas Toepfer  
Chairman of the supervisory board: Dr. Richard Pott  
Registered office: 51365 Leverkusen, Local court of Cologne, HRB 49892*