## Request for information on pentadecafluorooctanoic acid (CAS No: 335-67-1, PFOA, perfluorooctanoic acid), its salts and PFOA-related compounds

Request:

1. Parties and observers are invited to submit information that would assist the **possible defining by the Committee of specific exemptions for production and use of PFOA, its salts and PFOA-related compounds** in particular in the following applications:
2. Membranes intended for use in medical textiles, filtration in water treatment, production processes and effluent treatment: information on the scope of the applications, used amounts, availability of alternatives and socio-economic aspects;
3. Transported isolated intermediates in order to enable reprocessing in another site than the production site: information on the quantities used, extent of transport and risks, and use;
4. Medical devices: information on specific applications/uses and timelines foreseen as needed for potential related exemptions;
5. Implantable medical devices: information on the quantities used, extent of transport and risks, and use;
6. Photo imaging sector: information on paper and printing, and information relevant for developing countries;
7. Automotive industry: information on spare parts;
8. Fire-fighting foams: information on chemical composition of mixtures and the volumes of pre-installed amount of fire-fighting foam mixtures.

* The Australian Government’s National Industrial Chemicals Notification and Assessment Service (NICNAS) has reviewed the available information and found no indication that the chemicals PFOA (Octanoic acid, pentadecafluoro-), and its direct precursor APFO (Octanoic acid, pentadecafluoro-, ammonium salt), are manufactured in Australia or imported as base chemicals.
* The following information on the industrial uses in Australia of PFOA, or products containing PFOA and related substances, dates from 2003 to 2007 as no more recent information is available.
* Import of a liquid fluoropolymer surfactant dispersion product for use as primer for non-stick metal cookware. The importation equated to approximately 50 gm and 25 gm of PFOA in 2003 and 2004, respectively.
* Fluoropolymer dispersion polymer for use in paints. The importation equated to 10 kg annually of PFOA.
* Fire-fighting foam: The import in the past of two fluorosurfactant products for use in the manufacture of Class B fire-fighting foam was reported. The importation equated to approximately 48 gm and 0.6 gm of PFOA in 2002 and 2003, respectively. The importation and sale of the products in Australia was discontinued in 2003.
* Textile and carpet protection products containing some fluoropolymers were imported into Australia.
* An antifoam product containing <10% of a PFOA-related chemical was imported in 2005 for use in a dyeing process with sulfur dyes. The total quantity imported was approximately 10 kg.
* A de-dusting product for industrial use and a consumer paint product, both containing less than 100 ppm PFOA salt, were imported. The total volumes of PFOA salt in both products were 10 and 71 kg in 2004 and 2005, respectively. The concentrations of PFOA salt in these products were reduced to less than 10 ppm in 2006.
* PFOA could be present as an impurity in polytetrafluoroethylene (PTFE) products and in some fire-fighting foam products imported into Australia. These products also include industrial painting/coating products, and some wiring products. The concentrations of PFOA in these products are at trace levels ranging from parts per billion (ppb) to less than one part per million (ppm).
* In Australia, following co-regulatory activity between NICNAS and industry, the imports of PFOA polymers have virtually ceased, dropping from 27.5 tonnes in 2003 to approximately 20 kg imported in 2004, of which only 25 g was used in the local manufacture of non-stick cookware.
* Regarding the seven specific applications the Committee is seeking information on, only use in fire-fighting foams is known to be applicable in Australia. No information on the chemical composition of mixtures of, and the volumes of pre-installed amount of, fire-fighting foam mixtures is available.
* The information provided here is only applicable to industrial uses. Medical uses have not been identified.

1. Parties and observers are invited to submit information on **unintentional formation and releases** of PFOA, its salts and PFOA-related compounds, in particular from primary aluminium production and from incomplete combustion.

* PFOA may be unintentionally released to the environment from disposal of other chemicals manufactured using APFO, disposal of imported articles treated with PFOA or APFO, or as a result of environmental degradation of other long-chain fluorinated chemicals. In particular, the use of fluoropolymers (which may contain PFOA residues) has previously been reported in the manufacture of non-stick metal cookware, in paints, in fire-fighting foams, and in textile and carpet protection
* No information was identified by NICNAS suggesting the use of PFOA, its salts and PFOA-related compounds in aluminium production in Australia.

1. Parties and observers are invited to submit information on **chemical identity of PFOA-related compounds chemical list**.

* A NICNAS assessment under the Inventory Multi-tiered Assessment and Prioritisation (IMAP) framework concluded that PFOA is expected to be the major product of environmental biodegradation for the following five long-chain fluorinated chemicals on the Australian Inventory of Chemical Substances (AICS) (NICNAS undated).

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| **CAS RN** | **Chemical Name** |
| 678-39-7 | 8:2 fluorotelomer alcohol |
| 1996-88-9 | 8:2 fluorotelomer methacrylate |
| 93705-98-7 | 8:2 fluorotelomer methacrylate, polymer with methyl methacrylate |
| 68187-42-8 | Propanamide, 3-[(.gamma.-.omega.-perfluoro-C4-10-alkyl)thio] derivatives |
| 53515-73-4 | 7:1 fluoroalcohol methacrylate, polymer with acrylic acid |

**References**

NICNAS (2015). *IMAP Environment Tier II Assessment of Perfluorooctanoic Acid (PFOA) and its Direct Precursors*. National Industrial Chemicals Notification and Assessment Scheme, Sydney, Australia.

NICNAS (undated). *IMAP Environment Tier II Assessment for Indirect Precursors to Perfluorooctanoic Acid (PFOA)*. National Industrial Chemicals Notification and Assessment Scheme, Sydney, Australia.