Comments to UNEP on the use of Deca-BDE in the Aerospace Industries

Introduction

ADS is the Trade Organisation for the Aerospace, Defence, Security and Space sectors in the UK, and as such represents the manufacturers of aircraft for civil or military transportation, as well as the defence and security sectors. We note that our members are required to ensure fire safety and meet strict standards imposed by regulatory authorities such as EASA in EU or FAA in USA, and to manufacture them our members have to purchase and integrate articles that have to meet these rigorous “fire-worthiness” requirements.

The remarks below are in response to the invitation from UNEP, to review and provide comments on the draft document relating to the recommendation on the listing of decabromodiphenyl ether (commercial mixture, c-decaBDE) in annex A to the Stockholm Convention on Persistent Organic Pollutants.

ADS Comments

Deca-BDE has been used historically in the Aerospace and Defence industries as a high performance flame retardant however, due to concerns over its environmental impact, it has been largely supplanted in newer Aerospace industry products. Deca-BDE is still, however, present in a range of parts in older aircraft requiring certification testing for fire safety and is consequently still used in components and spare parts. Product types affected include a range of polymer and textile items such as emergency slides, heat insulation on flight data recorders (commonly known as “black boxes”), life vests, cables, carpets, interior panels and structural composites as well as seat coverings.

In almost all cases alternatives are available and suitable for substitution, however in many cases the alternatives identified have yet to be qualified – a prime example being the heat insulation on “black boxes”.

Fire safety is a significant issue in aviation, in particular for crash safety reasons. A change to a flame retardant is a major event and requires a re-certification of the change, often involving repeat flame resistance testing of each product type in accordance with standard airworthiness testing procedures.

The amount of deca-BDE used in current aerospace industry manufacturing is estimated to be less than 20 tonnes per annum globally, and is continuing to decline as newer products are introduced. Parts used in the maintenance and repair of older products continue to be produced and used on the principle of like for like replacement. The logistics in terms of cost and time required to re-certify a change of flame retardant is substantial and we believe presents a disproportionate impact on our industry, should this requirement be mandated.

Additionally the early removal of products from ageing aircraft places a significant burden on the waste stream, introducing a considerable quantity of this chemical over a short period of time, possibly in places less well equipped than the UK in terms of dealing with the recycling of deca-BDE.
Whilst ADS therefore supports a restriction for future use of deca-BDE in new aircraft types, we feel that a derogation for older product types should be allowed, similar to that proposed for a parallel REACH Restriction.

Yours sincerely

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