<table>
<thead>
<tr>
<th>Name</th>
<th>Hexabromocyclododecane (HBCDD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number</td>
<td>25637-99-4 and 3194-55-6</td>
</tr>
<tr>
<td>EINECS number</td>
<td>247-148-4 and 281-695-9</td>
</tr>
<tr>
<td>What is HBCDD?</td>
<td>HBCDD is a brominated flame retardant, used to establish fire safety in foams, plastics and textile coatings.</td>
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<tr>
<td>Where is it used?</td>
<td>HBCDD is used mainly in polystyrene thermal insulation foams, for building and construction. These foams make a key contribution towards meeting global, national and regional energy efficiency targets. It is also used in coatings for a wide range of textile products, such as roller blinds, cinema screens, awnings and carpets for public buildings, fabrics used in cars and aeroplanes, and as an additive in some HIPS (high impact polystyrene) parts for electrical and electronic appliances.</td>
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<tr>
<td>Why is it used?</td>
<td>Flame retardants are essential to meet fire safety standards and to protect human lives and property from fire. HBCDD currently has no technically and commercially viable alternatives in polystyrene thermal insulation foams, despite intensive research, which the industry is committed to continue. The same applies to some specific textiles applications.</td>
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<tr>
<td>Is it safe?</td>
<td>HBCDD presents no health risks to consumers. This has been established following thorough assessment by EU scientists to identify any potential risks. It is not classified as carcinogenic, mutagenic or reprotoxic. However there are some environmental concerns, because HBCDD has been identified as having Persistent, Bioaccumulative and Toxic (PBT) properties, relating to its effects on aquatic organisms, and its presence in the environment. The presence of HBCDD in the environment relates to past emissions; today these are well controlled, as a result of emissions management and monitoring programmes. The European HBCDD industry is cooperating closely with all the relevant European authorities to further reduce these emissions.</td>
</tr>
<tr>
<td>Why is HBCDD on the REACH Candidate List?</td>
<td>Substances are placed on the Candidate List for Authorisation based on their potential to cause harm (their hazard) rather than on any actual risk they may pose. HBCDD was included as a result of environmental concerns, based on its PBT properties, as noted above.</td>
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| Where can I find more information? | [www.ebfrip.org](http://www.ebfrip.org)  
[www.vecap.info](http://www.vecap.info) |
<table>
<thead>
<tr>
<th>Name</th>
<th>Di-n-butyl phthalate (DBP)</th>
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<tbody>
<tr>
<td>Also known as dibutyl phthalate</td>
<td></td>
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<tr>
<td>CAS number</td>
<td>84-74-2</td>
</tr>
<tr>
<td>EINECS number</td>
<td>201-557-4</td>
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</tbody>
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<tr>
<th>What is DBP?</th>
<th>DBP is a substance that is used as a plasticiser to make PVC plastic soft and flexible. It is a colourless and odourless organic chemical.</th>
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<tr>
<th>Where is it used?</th>
<th>DBP is used in a range of soft PVC products including footwear, electrical cables, and artificial leather. It is also used in printing inks, adhesives, sealants/grouting agents, nitrocellulose paints, film coatings and glass fibres.</th>
</tr>
</thead>
</table>

| Why is it used?               | Plasticisers are essential to make PVC flexible. PVC is rigid by nature but plasticisers give it similar properties to rubber: it becomes flexible and expandable, whilst retaining its shape.  
There are many different plasticisers available but a manufacturer of PVC will make what they believe to be the best choice for their particular products.  
DBP is used because for many years it has provided particularly good processing and end product performance. |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|

| Is it safe?                   | The use of DBP has been carefully considered by EU scientists and it is already well regulated by European legislation relating to toys and childcare articles, cosmetics, food contact materials and medicinal products.  
Indeed, DBP has been used for more than 50 years without a single known case of anyone having been harmed as a result.  
DBP is not classified as a human carcinogen or mutagen and it does not accumulate in humans or in the environment |
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<tr>
<th>Why is DBP on the REACH Candidate List?</th>
<th>Substances are placed on the Candidate List for authorisation based on their potential to cause harm (their hazard) rather than on any actual risk they may pose. In the case of DBP, it has been put on the candidate list due to reproductive effects that have been seen during tests on rodents. However, as these effects are only seen at levels much higher than humans are usually exposed to, there is no danger from its use in most everyday PVC products.</th>
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<tr>
<th>Where can I find more information?</th>
<th><a href="http://www.dbp-facts.com">www.dbp-facts.com</a></th>
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