Summary Report: Emissions Testing
Hilti CF-I 750 Single Component Insulating Foam

On March 15th, 2004, EUROFINS Danmark received a sample of the Hilti CF-I 750 Single Component Insulating Foam (Batch 369800/8) for emissions testing during a simulation of the application. New cartridges were emptied completely into a small box. All MDI aerosol < 10 µm being emitted into the air was collected at the outlet of the box by use of a cyclone and the amount was analysed following ISO 16702 (HPLC / UV after derivatisation).

Results

The emission test result was that no MDI aerosol was detected. The detection limit (expressed as MDI aerosol per cartridge) was transferred into a detection limit for the air concentration at three different typical workplaces. The real concentration at other workplaces - if any - can be expected below these values. The detailed test report has been delivered to HILTI AG.

<table>
<thead>
<tr>
<th>Diphenylmethane-4,4’-diisocyanate (MDI), aerosol &gt; 10 µm</th>
<th>Detection limit per cartridge</th>
<th>Normal workplaces</th>
<th>Unventilated narrow location</th>
<th>OEL</th>
<th>Highest expected concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS 101-68-8</td>
<td>µg</td>
<td>µg/m³</td>
<td>µg/m³</td>
<td>µg/m³</td>
<td>% of OEL</td>
</tr>
<tr>
<td>Results below these detection limits</td>
<td>&lt;0.0002</td>
<td>&lt;0.0001</td>
<td>&lt;0.0002</td>
<td>52</td>
<td>&lt;0.0004 %</td>
</tr>
</tbody>
</table>

< absent or less than the reported detection limit
1 µg = 0.001 mg
OEL: Occupational Exposure Limit; the lowest available OEL from a survey of national OELs.

In situations when the workman works very close to the source he might face considerably higher short-term exposures than the steady-state concentration indicates. On the other hand, this was considered in the scenario 3 (Unventilated narrow location) to a certain extent.

Conclusion

For all investigated workplace scenarios the maximum expected air contamination was far below the respective occupational exposure limit.

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The results are only valid for the tested sample(s).
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