Additional data on proposal ST/SG/AC.10/C.3/2022/9 - 5-Trifluoromethyltetrazole, sodium salt (TFMT-Na) in acetone

Submitted by the European Chemical Industry Council (Cefic)

Results of corrosivity and toxicity testing

1. This informal document is a supplement to official document ST/SG/AC.10/C.3/2022/9 proposing to introduce a new entry for the title compound in acetone as a desensitized explosive.

2. As reported in previous papers and discussions, finding a test laboratory for the evaluation of toxicological properties proved to be a huge challenge due to the explosive properties of the ingredient.

3. Cefic thanks the expert from Poland for recommending a qualified laboratory for the conduct of toxicological studies, which was able to solve the challenges in handling this substance and to successfully perform the appropriate tests.

4. The studies were carried out in accordance with the specified OECD test guidelines in adherence of the Good Laboratory Practices (GLP) quality requirements. The concentration of TFMT-Na in acetone was 29.1 % by weight in all studies.

5. The following results were obtained:

<table>
<thead>
<tr>
<th>Study type</th>
<th>OECD Test method</th>
<th>Procedure</th>
<th>Dose [mg/kg]</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute oral toxicity</td>
<td>423</td>
<td>Female Wistar rats</td>
<td>300 (fixed)</td>
<td>Number of deaths: 0 out of 6 animals; no macroscopic changes in gross necropsy examination. LD 50 &gt; 2000 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2000 (fixed)</td>
<td></td>
</tr>
<tr>
<td>In vitro skin corrosion</td>
<td>431</td>
<td>Reconstructed human epidermis</td>
<td>Non-corrosive</td>
<td></td>
</tr>
<tr>
<td>test</td>
<td></td>
<td>test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute dermal toxicity</td>
<td>402</td>
<td>Female Wistar rats</td>
<td>2000 (fixed)</td>
<td>Number of deaths: 0 out of 3 animals; no clinical and no macroscopic changes. LD 50 &gt; 2000 mg/kg</td>
</tr>
</tbody>
</table>

Committee of Experts on the Transport of Dangerous Goods
and on the Globally Harmonized System of Classification
and Labelling of Chemicals

Sub-Committee of Experts on the Transport of Dangerous Goods

Sixtieth session
Geneva, 27 June-6 July 2022
Item 2 (i) of the provisional agenda
Explosives and related matters: miscellaneous
6. For legal reasons, only the final test results are given in this informal paper. Further details are available through the expert from the Cefic delegation; contact Dieter.Heitkamp@bayer.com.

7. A study for inhalation toxicity could not be performed due to technical reasons. However, from the current data set only a very low hazard for this endpoint is to be anticipated.

**Conclusion**

8. 5-Trifluoromethyltetrazole, sodium salt (TFMT-Na) in acetone has no toxicity hazard according to Chapter 2.6 of the UN Model Regulations.