

**FORMAT**  
**for third party submission of information on alternatives for**  
**Applications for Authorisation**

**PUBLIC VERSION**

**Legal name of submitter(s):**



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## 1. ALTERNATIVE ID AND PROPERTIES

We have three major challenges when we try to replace MOCA in [REDACTED]. The balance of properties we try to achieve are fatigue resistance and low set in tension, i.e. the material must retain after unloading.

1. Some of the alternative chemicals available are good enough when it comes to properties but they are not possible to process in this type of application due to too short open time, i.e. to fast curing.
2. Other available alternatives gives a good balanced process but the properties needed are not sufficient, i.e. fatigue resistance is too low and the permanent deformation (set) is too high.

3. [REDACTED]

In addition, some of the available systems are excluded in this project due to previous experience. For example we have more than 40 years of experience from manufacturing these particular parts. More than 20 years ago, we were running a project in order to replace an existing TDI/PTMEG-MOCA cured type of urethane in the same application. At that time we tried 1,4 Butandiol (Cas no 110-63-4) and Ethacure 300 (Cas no 106264-79-3) [REDACTED]. These were by far outperformed by our present TDI/PEA-MOCA material.

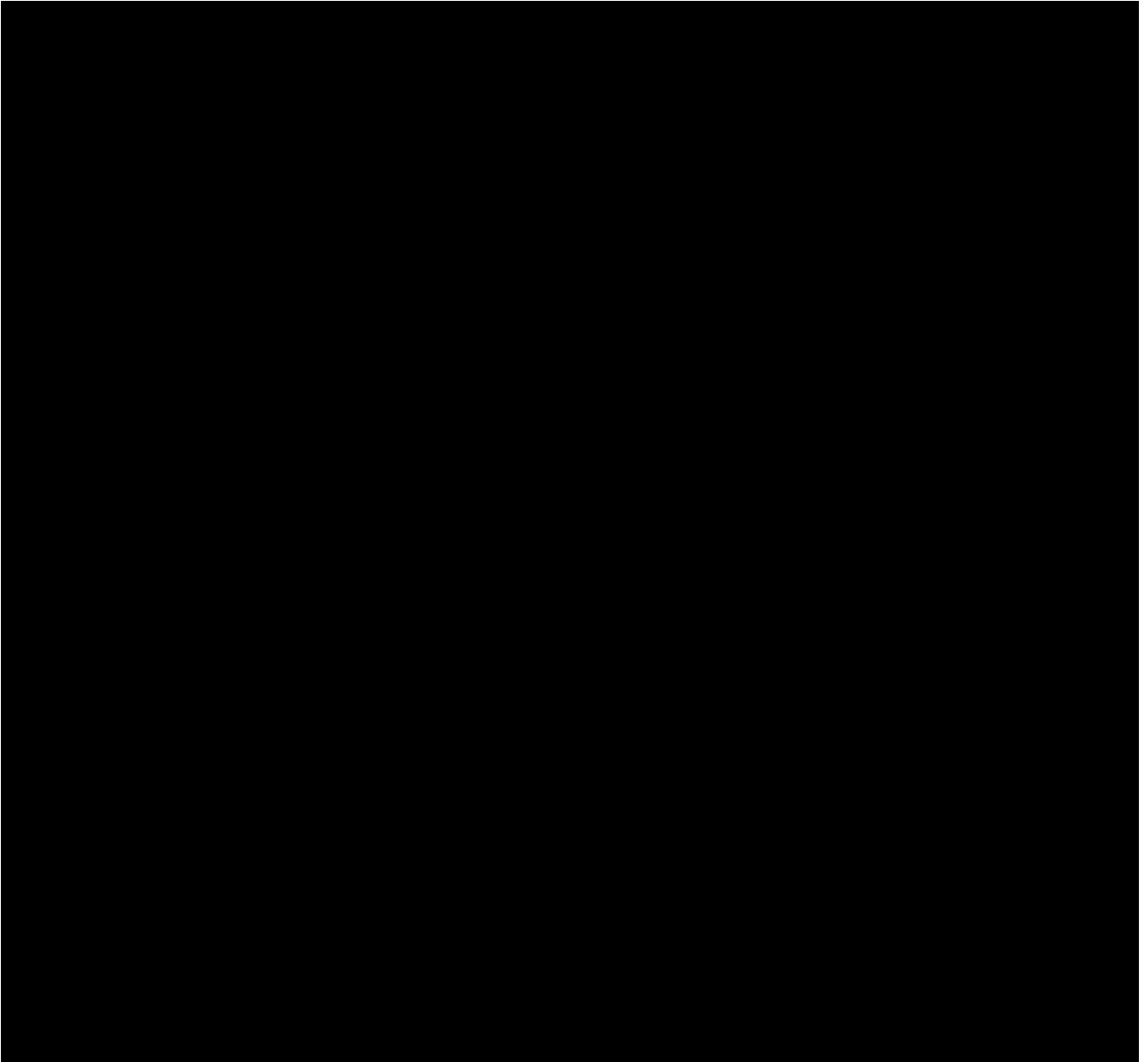
Please find in the table below results from the most viable tests executed from early 2014. In addition to the most viable options below, more than 10 are already conducted and further 3 tests are planned in near future.

Once the samples are completed and an alternative is selected, it will follow the production of the full-scale detail for validation of the performance.

[REDACTED]

For this reason, we apply for an authorization for MOCA, for these products, until we have solved the problems.

## **2. TECHNICAL FEASIBILITY**



## **3. ECONOMIC FEASIBILITY**

Except from the moulds, we have taken into consideration only the technical point of view.

#### 4. HAZARDS AND RISKS OF THE ALTERNATIVE

	Hazard Statements
	H302, H317, H400, H410
	H413
	H302, H336
	H315, H319 H319

#### 5. AVAILABILITY

From the curative point of view there is no significant difference in availability.

#### 6. CONCLUSION ON SUITABILITY AND AVAILABILITY OF THE ALTERNATIVE

The last line in the table is the most suitable alternative

#### 7. OTHER COMMENTS

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#### REFERENCES

Safety Data Sheets from suppliers.

#### APPENDIXES

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