

Dow and SAFECEM have successfully submitted an application for authorisation

In October 2014 Dow/SAFECEM received confirmation from the European Chemical Agency (ECHA), that the application for authorisation for the use of Trichloroethylene (TRI) as an extraction agent for bitumen in the asphalt industry was successfully submitted.

Dow/SAFECEM applied for a seven year review period, which means if granted it will be possible to use Trichloroethylene for this use until 2023. Downstream users who want to use TRI in the asphalt analytic, even after the sunset date (21.04.2016) have to apply the described risk management measures (RMM) as set out in the application for authorisation accordingly. If not all of the RMM are applied then the use of TRI in asphalt analytic is not covered by the authorisation.

An additional Analysis of Alternative (AoA) is not necessary. The AoA was done by Dow/SAFECEM in detail within the application of authorisation. A granted authorisation is valid all over Europe. Nevertheless the scope of the AoA is limited to the use of TRI in Germany. It can be assumed that identical or similar conditions (technical reasons why TRI is used and legal background) apply for other European countries in which TRI is used for asphalt analysis and the argumentation is therefore also valid for the use of TRI in asphalt testing in other European countries. Based on the AoA users must check if these condition apply to their operation and whether TRI can get substituted or not. It is strongly recommended to document this evaluation in writing.



The SAFE-TAINER™ system is implemented in the market for many years. It enables the safe handling, storage and transportation of TRI and is essential to cover all described RMM from the application for authorisation.

Checklist of Risk Management Measures

Risk Management Measures (RMM)	Check
1. It is only allowed to use TRI for the extraction of bitumen or the cleaning of used equipment in special designed closed cleaning machines. It is <u>not allowed</u> to use TRI for manual cleaning of e.g. work benches or other surfaces.	
2. The asphalt analyser needs to be a 'state of the art' machine which is a closed machine with an included wash drum. Air-tightness of the machine is checked every month. Bitumen extraction in open machines (sieve tower procedure) is <u>not</u> included in the application for authorisation.	
3. The asphalt analyser has to be stored under a fume hood, a cabinet with exhaust ventilation or in a room that is segregated by glass doors and equipped with exhaust ventilation.	
4. Recovery of TRI from wet bitumen needs to be done through rotary evaporation under the fume hood.	
5. The cleaning of used equipment (e.g. glassware) has to take place inside the asphalt analyser or in a special designed closed cleaning machine which is stored like the asphalt analyser.	
6. Delivery, filling, storage and handling of TRI are conducted via the SAFE-TAINER™ system.	
7. Removal of used TRI must be done by evacuation through a vacuum pump and transfer from the asphalt analyser to dedicated waste solvent container (which can be coupled to the asphalt analyser in the same way as the SAFE-TAINER™ system).	
8. The use of the SAFE-TAINER™ system and the dedicated equipment need to be as described in the operating manual.	
9. Solvent analysis has to take place under the fume hood. During each worker activity dealing with TRI (solvent analysis, solvent sampling and maintenance) the workers have to wear gloves (tested to EN374) and plastic goggles.	
10. Irrespective of the RMM mentioned in the application for authorisation the national threshold for TRI must be met. Is no national threshold established the exposure must be minimised at its best.	
11. On the basis of the authorisation granted, downstream users need to notify the European Chemical Agency (ECHA) within three months of the first supply of the substance {Art. 66(1)} after sunset date. Such notifications will be kept in a register maintained by ECHA and will be made available to the 'Competent Authorities' of the 'Member States' on request.	

This checklist is generated from today's point of view. The granting of an authorisation can include further conditions and monitoring arrangements.