

# TRICHLOROETHYLENE SUSTAINABILITY PROGRAM

## SAFECEM EFFORTS TOWARDS THE SUSTAINABILITY OF TRICHLOROETHYLENE

Trichloroethylene is widely recognized within the industry as one of the most efficient solvent with unique properties for high precision surface cleaning and degreasing. Its distinct efficiency in comparison to alternative processes along with its wide range of approvals within the aerospace industry still makes trichloroethylene the solvent of choice from a manufacturing viewpoint. In some applications trichloroethylene is still indispensable and substitution is not possible while keeping the same cleaning results. Where substitution is possible SAFECEM recommends to evaluate opportunities and offers a wide range of viable cleaning mediums like DOWPER™ MC, MECTHENE™ MC or DOWCLEN™ 16xx series.

Dow and SAFECEM have already adopted a number of activities. These include active Risk Management such as the use of chlorinated solvents (CHC) in the SAFE-TAINER™ system, coordinated service elements and special laboratory analyses to prolong the lifetime of the solvent in cleaning equipment and to prevent premature bath exchanges. We place great importance on consulting and training our customers during the period of solvent use and beyond, to optimize processes.

To ensure that our mutual customers continue to benefit from the outstanding cleaning results achieved with trichloroethylene we have developed and will undertake the below mentioned actions, according to the principles of Responsible Care® and the Product Stewardship Guidelines.

### Trichloroethylene Voluntary Industry Commitment

The producers of trichloroethylene, including Dow/SAFECEM, have committed to the Trichloroethylene Voluntary Industry Commitment. From January 01, 2011, independent of the quantity thresholds stipulated in the VOC guidelines, only those customers who use the solvent in closed equipment will be supplied with trichloroethylene. The trichloroethylene Voluntary Industry Commitment is supported by the European Commission.

### CHEMAWARE™ Sharing Knowledge

Together with our distributor network and the leading manufacturers of high quality cleaning machines, we have established the information platform CHEMAWARE™ to provide our mutual customers with information about a safe and high quality cleaning process in full compliance with legislation. This information will be updated frequently.

### Trichloroethylene Conversion to the SAFE-TAINER™ system

All Dow/SAFECEM distribution partners have committed themselves to exclusively supply our trichloroethylene grades (NEU-TRI™ E, NEU-TRI™ L and HI-TRI™ SMG) in the SAFE-TAINER™ system and therefore no longer in drums, as of April 01, 2009. Their customers have been informed accordingly and the volume of trichloroethylene drums in the market is decreasing continuously. This results in active Risk Management for the use of these products.

### Trichloroethylene – Responsibility of the whole Supply Chain

The SAFE-TAINER™ system is SAFECEM's cradle to cradle solution, which includes the supply of fresh solvent and the take-back of waste material in a safety system as well as SAFECEM original accessories and full service offering. To assure that the customer is served with the best available technology and to contribute to the sustainability of trichloroethylene, we have increased our efforts to always supply our customers with both the SAFE-TAINER™ system for fresh and for waste material. Therefore SAFECEM takes over the responsibility for the safe use of trichloroethylene along the entire supply chain.

### Mandatory Solvent Training

To provide the best possible support for the use of trichloroethylene in the SAFE-TAINER™ system we will conduct a solvent training at all existing customer sites, which have chosen to use trichloroethylene long-term. Furthermore, a mandatory solvent training will be implemented for all customers who purchase new equipment. With these trainings, we want to pass on the technical and chemical know how of our specialists to provide the utmost support to existing and new customers. This will enable machine operators to manage the risk of the solvent adequately.