

Continuing with the series on blind spots in Hazop studies we move on to Material safety data. This forms the core of understanding the risks involved with the plant and any error in this would amplify the results erroneously.

1. We have all the data required

This is the statement most HAZOP facilitators hear at the start of the HAZOP. The biggest pitfall is to accept this fact and to start with the HAZOP just to find that data for intermediates is missing. This has the potential not only to throw the HAZOP off track but also derail the project progress.

2. MSDS is all we require

This is a corollary to the first pitfall. Sure material safety data sheets have most of the safety related information summarised at one place. But they leave a lot unsaid. Reaction DTA, detailed flammability data are just examples.

3. Sampling errors

Test results for safety data are directly proportional to the accuracy of sampling. Improper handling of test samples leading to vaporisation of high volatiles and taking samples at improper locations for dust leading to a different particle size distribution are just two examples of sampling errors.

4. Google it

Well the internet has a huge pool of safety data information but not all is authentic and there could be variations in properties of materials from supplier to supplier. Do not rely on the internet as your source for Safety data. Best is to ask your specific supplier for it. Many a times specific diluents.

5. Testing trouble

Many a times safety data needs to be established for new chemicals or intermediates and the trick is getting accurate material testing done. Not only the adequate number of tests need to be asked for but it has to be ensured that the testing is done at the appropriate operating conditions. And of course not to forget accredited testing agencies, standardised testing methods and calibrated test instruments.