

ISOPA USE INFORMATION on TDI
- Explanation of the present Exposure Scenarios -

Dear customer or Downstream User,

We would like to guide you through the vast amount of information that you will find in your suppliers extended Safety Data Sheet (e-SDS) and in the "Draft ES TDI" in order to help you meeting your deadlines of 6/12 months after receiving the eSDS to conclude that your use is covered (or is not covered), as specified in article 39 of the REACH Regulation.

1. Background

In the past 3 years ISOPA and its members have collected a great number of customer uses through company internal know how or via direct contact with customers or the relevant customers associations.

This process resulted in the "identified uses" for the Polyurethanes industry, expressed by "use descriptors", and the development of Exposure scenarios for TDI per life cycle stage and per application.

In a next phase, inhalation, dermal and environmental exposure assessments have been carried out for each single identified use of TDI. All this information, together with all relevant hazard information, has been compiled into a Chemical Safety Report (CSR).

This "ISOPA use information on TDI" can assist you to better understand the structured approach on the existing exposure scenarios and will guide you through the steps to take before contacting your supplier, or the ISOPA office.

In anticipation of the fact that you will have many e-SDS's to review we have chosen to provide you with an online version in which you can retrieve the Exposure Scenarios of all TDI supported uses.

You can find these exposure scenarios on the ISOPA website :

<http://www.isopa.org/isopa/index.php?page=exposure-scenarios-2>.

2. Grouping of TDI uses into Exposure Scenarios (ES)

Based on the uses reported in the document: “ISOPA communication in the supply chain on Aromatic Diisocyanates (MDI & TDI) & Polyols”

(<http://www.isopa.org/isopa/uploads/Documents/documents/ExposureScenarios.pdf>),

the following Exposure Scenarios are taken into account for exposure estimation:

| ES-No. | Exposer Scenario-Name | Industrial use | Professional use | Consumer use |
|--------|--|----------------|------------------|--------------|
| ES1 | Manufacturing of TDI | X | | |
| ES2 | Manufacturing of other substances | X | | |
| ES3 | Formulating, Repackaging & Distribution | X | | |
| ES4 | Flexible Foam | X | | |
| ES5 | Coatings | X | X | |
| ES6 | Adhesives & Sealants | X | X | |
| ES7 | Elastomers, TPU, Polyamide, Polyimide & Synthetic Fibres | X | | |
| ES8 | Other Composite Material | X | X | |

In the Draft ES TDI you will find the above exposure scenarios clustered into seven broad exposure scenarios following the life cycle stages of TDI, as below:

| Exposure Scenario cluster | Life cycle stage | TDI |
|---------------------------|---|--|
| 1 | Manufacturing | ES1 |
| 2 | Use as intermediate and Formulation, Repackaging & Distribution | ES2 und ES3 |
| 3 | End uses – industrial | ES4 – Flexible Foam ES5 – Coatings ES6 – Adhesive & Sealants ES7 – Elastomers, TPU, Polyamide, Polyimide & Synthetic Fibres ES8 – Other Composite Material |
| 4 | End uses – professional | ES5 – Coatings ES6 – Adhesive & Sealants ES8 – Other Composite Material |
| 5 | End uses -consumer | No consumer uses |

3. Comparison and validation of the Exposure Scenarios with the customer process

When you receive the extended safety data sheet from your supplier, you should check that your use(s) are covered by this eSDS by proceeding according to the outlined steps:

Please note that there is not just one way in which your uses may be described. Consider the way in which you handle the product and any formulated products that you make, and compare this against the descriptions included in the Exposure Scenarios. Focus on the ES details and associated Use Descriptors that best match your own activities.

① As a Downstream User in the PU-industry – you should check if your process/es is/are covered by one of the ES of TDI by comparing the Use Descriptors [UD], the Operational Conditions [OC] and the Risk Management Measures [RMMs] in the relevant ES for TDI with the UD, OC & RMM which you will have identified for your own processes.

Guidance on Use Descriptor System:

http://guidance.echa.europa.eu/docs/guidance_document/information_requirements_r12_en.pdf

Keep in mind that the identified uses have been described by the “Use descriptor system” from ECHA, which may be different from the PU industry jargon.

See also “ISOPA translation of PROCs into PU language” on: www.isopa.org → REACH

If you are applying alternative RMMs to those identified in the relevant ES this is not of concern if they offer a similar level of control based on your own use conditions. You also have the possibility to measure exposures during your process and to demonstrate e.g. by workplace monitoring, that exposures are below the relevant worker DNEL (and potentially applicable OEL) values for acute and long-term situations.

② If the UD, OC & RMM are equal, you are covered and no further action is required. Should this not be the case, go to the next step.

③ ISOPA has made some interpretation on certain Use Descriptors and it is recommended to also read the relevant document prior to take any further action. (<http://www.isopa.org/isopa/uploads/Documents/documents/ISOPApotionUseDescriptor.pdf>)

If you consider your processes now covered there is no need for further action; if you conclude that you are not covered go to the next step.

④ Contact your trade association to verify if you have made the right interpretation and to check if the seemingly missing use is not covered elsewhere or differently and agree on next steps to take.

⑤ Preferably the trade association should contact ISOPA and discuss the discrepancy. This way ISOPA can ensure that the different associations remain aligned or alternatively

⑥ At <http://www.isopa.org/isopa> (ISOPA-Homepage) you will find an icon “REACH” and following this link you will find further information from ISOPA concerning the topic “What to do, if your use or application does not appear to be covered by the listed exposure scenarios?”