

## **ISOPA USE INFORMATION on MDI - 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 (eSDS) and in the “Draft ES MDI” 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 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 customer associations.

This process resulted in the “identified uses” for the Polyurethane industry, expressed by “use descriptors”, and the development of Exposure scenarios for MDI 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 MDI. All this information, together with all relevant hazard information, has been compiled into a Chemical Safety Report (CSR).

This “ISOPA use information on MDI” 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 eSDSs to review we have chosen to provide you with an online version in which you can retrieve the Exposure Scenarios of all MDI 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 MDI 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 MDI	X		
ES2	Manufacturing of other substances	X		
ES3	Formulation (incl. Resin Manufacture), Repackaging and Distribution	X		
ES4	Flexible Foam	X		
ES5	Rigid Foam	X	X	X
ES6	Coatings	X	X	X
ES7	Adhesives and Sealants	X	X	X
ES8	Elastomers, TPU, Polyamide, Polyimide and Synthetic Fibres and Manufacturing of other Polymers	X		
ES9	Composite Material Based on Wood/Man-made/Mineral/Natural Fibres	X	X	
ES10	Foundry	X		
ES11	Other Composite Material	X	X	
ES12	Cleaning with Aprotic Polar Solvents	X		
ES13	Cleaning [no Aprotic Polar Solvents]	X	X	

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

Exposure Scenario cluster	Life cycle stage	MDI
1	Manufacturing	ES1
2	Use as intermediate and Formulation, Repackaging & Distribution	ES2 und ES3
3	End uses – industrial	ES4 – Flexible Foam ES8 – Elastomers, TPU, Polyamide, Polyimide and Synthetic Fibres and Manufacturing of other Polymers
4		ES5 – Rigid Foam ES6 – Coatings ES7 – Adhesive and Sealants
5		ES9 – Composite Material Based on Wood/Man-made/Mineral/Natural Fibres
6		ES10 – Foundry ES11 – Other Composite Material
...		

Exposure Scenario cluster	Life cycle stage	MDI
7	End uses – professional	ES5 – Rigid Foam ES6 – Coatings ES7 – Adhesive and Sealants ES9 - Composite Material Based on Wood/Man-made/Mineral/ Natural Fibres ES11 – Other Composite Material
8	End uses -consumer	ES5 – Rigid Foam ES6 – Coatings ES7 – Adhesive and Sealants
9	End uses – industrial and professional	ES12 - Cleaning with Aprotic Polar Solvents ES13 - Cleaning without Aprotic Polar Solvents

### 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 MDI by comparing the Use Descriptors [UD], the Operational Conditions [OC] and the Risk Management Measures [RMMs] in the relevant ES for MDI with the UD, OC and 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](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 is different from the PU industry jargon.*

*See also “ISOPA translation of PROCs into PU language” on: [www.isopa.org](http://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/ISOPApositionUseDescriptor.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) under “REACH” and “exposure scenarios” you will find “[What to do if your use or application does not appear to be covered by the listed exposure scenarios ?](#)” with further information from ISOPA.