Use of aliphatic polyisocyanates in home worker applications

Aliphatic polyisocyanates are manufactured by converting monomeric diisocyanates, e.g. HDI (hexamethylene diisocyanate) or IPDI (isophorone diisocyanate), into higher molecular weight derivatives. Aliphatic polyisocyanates are mainly used as hardeners for high quality surface coatings and adhesives in industrial and professional applications since many years. They can be handled safely, but the reactive nature of these substances requires certain precautions and controlled conditions in handling and during application.

Safety measures are specifically needed to prevent from risks resulting from irritating and sensitizing properties and include appropriate skin and eye as well as respiratory protection, especially in spray applications. Such safety measures are reported in safety data sheets and special product information. To ensure the safe use of aliphatic polyisocyanates, appropriate information, training and observance of necessary safety measures is of high importance. This, to our understanding, can only be achieved in industrial and professional use. The observance of necessary safety precautions, however, cannot be guaranteed in the home worker sector.

Therefore ALIPA strongly recommends against the use of aliphatic polyisocyanates in this area (irrespective of the content of residual monomeric diisocyanates). The members of ALIPA inform their customers by statements in all relevant safety data sheets that aliphatic polyisocyanates as well as coatings or adhesives based on aliphatic polyisocyanates should only be used for industrial and professional applications and are not suitable for the home worker sector. Consequently, ALIPA members have excluded consumer uses from the REACH registration dossiers of aliphatic polyisocyanates.

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*) ALIPA Aisbl is the European Aliphatic Isocyanates Producers Association. Members of ALIPA are the major producers BASF Aktiengesellschaft, Covestro Deutschland AG, Evonik Resource Efficiency GmbH and Vencorex France.