

Metodologia per la valutazione dell'esposizione cutanea professionale

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KEY WORDS

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SUMMARY

«Occupational dermal exposure to chemicals: a methodological proposal». Background: *Dermal risk assessment of exposure to chemicals is difficult due to the lack of standardisation of the methods used in exposure quantification; further limits concern the extent of skin contamination and especially dermal absorption of different substances. To solve these problems many authors proposed conceptual models founded on theoretical assumptions and experimental data, but their use in occupational settings revealed many difficulties. A possible alternative is the use of a check-list that permits evaluation of occupational dermal contamination hazards.* Aims: *To propose a simplified method for dermal risk assessment.* Methods: *Dermal contamination risk evaluation, chemical hazard quantification and duration of exposure are the basic features of the method. The first step assesses working conditions, use of protective devices, skin contamination directly observed, personal hygiene of workers: all information, collected by a trained observer, is scored according to literature data and/or to authors' personal experience. Chemical hazard quantification is obtained from safety data sheet evaluation (R phrases classification and chemical-physical characteristics of the chemical in use). The method allows a preliminary dermal exposure assessment to be made, subdivided on hazard bands.* Results: *The method permits a rapid dermal exposure assessment to be made and suggests intervention measures to decrease dermal risk.* Conclusions: *A check-list is proposed that can be a useful and easy method to assess dermal exposure to chemicals, particularly in small- and medium-sized enterprises.*

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