DIN EN ISO 13977-1:2026-12 (E)

Workplace air - Assessment of dermal exposure - Part 1: Framework for dermal exposure assessment (ISO 13977-1:2026)

Contents

Page

Foreword ... **iv**

Introduction ... **v**

1 Scope ... **1**

2 Normative references ... **1**

3 Terms and definitions ... **1**

4 Schematic overview of the framework for dermal exposure assessment ... **3**

5 Information gathering ... **5**
5.1 General ... 5
5.2 Substance-related information ... 5
5.3 Population at risk ... 7
5.4 Workplaces, tasks and/or processes at risk and risk management measures in place ... 7
5.5 Identify similar exposure groups ... 8

6 Dermal risk assessment ... **8**
6.1 Dermal hazard assessment ... 8
6.2 Qualitative dermal exposure assessment ... 9
6.2.1 General ... 9
6.2.2 Risk characterization per endpoint and substance ... 9
6.2.3 Availability of a dermal limit value ... 10
6.3 Quantitative dermal exposure assessment ... 10
6.3.1 Modelling dermal exposure ... 10
6.3.2 Measuring dermal exposure ... 11

7 Dermal risk assessment report ... **12**
7.1 General section in the report ... 12
7.2 Qualitative dermal exposure assessment ... 13
7.3 Quantitative dermal exposure assessment ... 13
7.3.1 Modelled dermal exposure assessment ... 13
7.3.2 Measured dermal exposure assessment ... 14

8 Evaluation and periodic reassessment ... **15**

Annex A (informative) **Conceptual model** ... **16**

Annex B (informative) **Local and systemic effects related to dermal exposure** ... **18**

Annex C (informative) **Checklist for visiting workplaces** ... **20**

Annex D (informative) **Kinney and Fine risk assessment method** ... **24**

Annex E (informative) **Models and tools** ... **26**

Annex F (informative) **Measurement of dermal exposure** ... **28**

Bibliography ... **33**