ANALYT MESSTECHNIK

INSTRUCTIONS FOR USE

SKC PERMEA-TEC Pads for Aromatic Isocyanates

How to test a protective glove against aromatic isocyanates with SKC PERMEA-TEC pads worn over an inner glove, read the red-orange breakthrough colour, and find a user-safe wearing time.

AMTC-IN-0029

Rev. 2 · October 2026

About this document

SKC PERMEA-TEC pads for aromatic isocyanates show whether a protective glove lets aromatic isocyanates such as TDI and MDI through to the skin, and after how long. You wear the pads on an inner glove, under the glove you want to test. If the chemical breaks through the test glove, the pads change colour to red-orange. SKC also calls the pads PERMEA-TEC sensors; it is the same product.

Product and supplied items (p. 6) gives the set-up, Before use (p. 7) the checks to make first and Procedure (p. 8) the hour-by-hour test that finds a user-safe wearing time for the glove. After use and sample handling (p. 9) shows how to read the pads. Specifications (p. 10) lists how little of each isocyanate the pads detect, and Ordering information (p. 11) the related products.

Keep these instructions for the lifetime of the product. The current revision is on the product page at analyt-mtc.com.

The product

Product	Order code	Pack
SKC PERMEA-TEC Pads for Aromatic Isocyanates	769-3002	20 pads

How these instructions mark information

⚠ CAUTION

A hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

Practices not related to personal injury — damage to the product, the process or the sample.

Note
Information that helps understanding; never a hazard.

Document information

Title	SKC PERMEA-TEC Pads for Aromatic Isocyanates — Instructions for use
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Applies to	SKC PERMEA-TEC Pads for Aromatic Isocyanates 769-3002
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Manufacturer	SKC Inc.

Revision history

Rev.	Date	Change
2	October 2026	Quality programme: new document type, number and identity pages.
1	October 2026	First issue.

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CHAPTER 1

Safety

Read the safety messages in this chapter before you test a glove.

Intended use

SKC PERMEA-TEC Pads for Aromatic Isocyanates show whether a protective glove lets aromatic isocyanates such as TDI and MDI through to the skin, and after how long. You wear them on an inner glove, under the glove you want to test.

Safety messages

The same messages also appear where they apply, before the step they concern.

NOTICE

The pads have a limited shelf life. Do not use a pack past the date printed on it. Past that date the pads may not change colour reliably, so the result is then invalid.

⚠ CAUTION

Pads stored next to food can contaminate it, and eating contaminated food can harm you. Keep the pads at ambient temperature, away from food.

Protective equipment

SKC recommends double gloving for the test: the pads sit on a glove you already wear, and the glove under test goes over them.

CHAPTER 2

Product and supplied items

SKC PERMEA-TEC pads for aromatic isocyanates show whether a protective glove lets aromatic isocyanates such as TDI and MDI through to the skin, and after how long. If the chemical breaks through the test glove, the pads change colour to red-orange.

Supplied: a pack of 20 PERMEA-TEC pads, order code 769-3002.

Set up the gloves

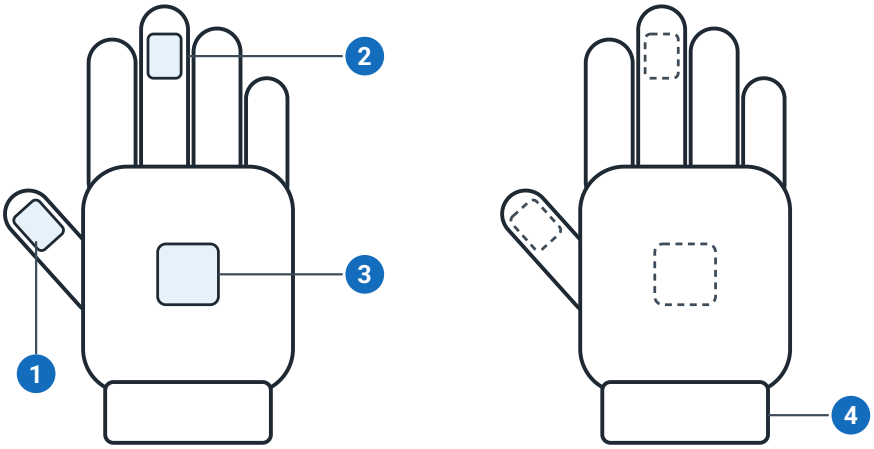


Figure 2-1. The set-up. Pads on the inner glove at (1) the thumb, (2) the middle finger and (3) the palm. (4) The glove under test, worn over the inner glove; the pads (dashed) sit underneath it.

CHAPTER 3

Before use

Before you start

NOTICE

The pads have a limited shelf life. Do not use a pack past the date printed on it. Past that date the pads may not change colour reliably, so the result is then invalid.

⚠ CAUTION

Pads stored next to food can contaminate it, and eating contaminated food can harm you. Keep the pads at ambient temperature, away from food.

Note

Always test over an inner glove. SKC recommends double gloving: the pads sit on a glove you already wear, and the glove under test goes over them.

Performance profile

Shelf life	Limited. Check the expiry date on the packaging.
Storage	At ambient temperature. Do not store with food.
Stability	Stable at ambient conditions.
Known interferents	None.

CHAPTER 4

Procedure

The test runs in one-hour rounds. After each hour you look at the pads. A red-orange colour means breakthrough; pads that have not changed colour mean no breakthrough was detected, within the detection limits given in Chapter 6.

Run the test

1. Put on your usual inner glove.
2. Stick one PERMEA-TEC pad on the outside of it at the thumb, one at the middle finger and one on the palm.
3. Pull the glove you want to test over the inner glove.
4. After 1 hour, take off the test glove.
5. Remove the three pads underneath.
6. Check the pads for breakthrough. A **red-orange** colour means aromatic isocyanates have passed through the test glove.
7. If no pad has changed colour, stick three fresh pads on the inner glove in the same places.
8. Put the test glove back on.
9. Wear it for another hour.
10. Repeat steps 4 to 6.
11. Carry on hour by hour to determine a user-safe time period for the glove.

CHAPTER 5

After use and sample handling

Reading the pads

Pad colour	What it means
Unchanged	No breakthrough detected in the last hour. Continue with fresh pads for the next hour (step 7).
Red-orange	Breakthrough. Aromatic isocyanates have passed through the test glove during the last hour of wear.

How little of each isocyanate turns a pad red-orange is listed in Lowest detection limits (p. 10). SKC also publishes a SWYPE Semi-Quantitative Color Reactions chart for its surface and dermal products.

Disposal

Dispose of used pads and their packaging under local regulations.

CHAPTER 6

Specifications

Lowest detection limits

The lowest detection limit (LDL) is listed per chemical, in micrograms. The pads detect breakthrough only at or above these amounts.

Chemical hazard	LDL (µg)
2,4-Toluenediisocyanate (2,4-TDI)	1.5
2,6-Toluenediisocyanate (2,6-TDI)	4
4,4-Methylenebis(phenyl isocyanate) (MDI)	2

No interfering substances are known. Shelf life, storage and stability are given in the Performance profile (p. 7).

CHAPTER 7

Ordering information

Order from Analyt-MTC with the order codes.

Product	Order code
SKC PERMEA-TEC Pads for Aromatic Isocyanates, pack of 20	769-3002
SKC D-TAM Skin Cleanser, personal size, 8 oz	769-5011

D-TAM removes water-insoluble contaminants from the skin. Its use is described in its own instructions.

CHAPTER 8

Service and contacts

SKC PERMEA-TEC Pads for Aromatic Isocyanates are made by SKC. Analyt-MTC is your contact for them.

Ordering and support

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Ordering and questions

Order PERMEA-TEC pads and D-TAM skin cleanser from Analyt-MTC with the catalogue numbers in these instructions. Ask Analyt-MTC if you have questions about these instructions or the products. Warranty and returns follow the terms of Analyt-MTC.

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