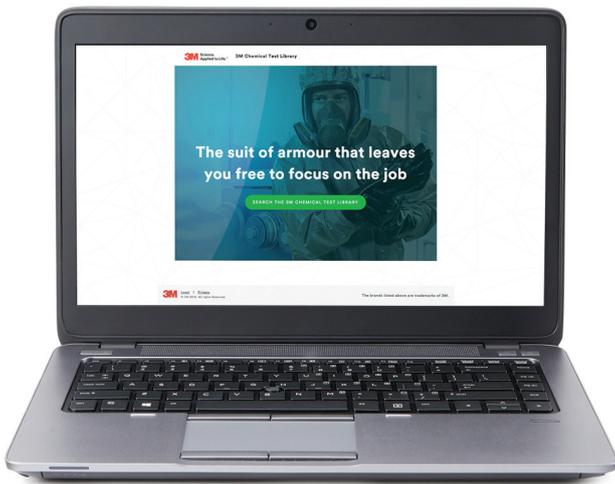


3M Science.
Applied to Life.™

Personal Safety

3M™ Chemical Test Library User Guide





The 3M Chemical Test Library has been created with the user in mind, we want to make your search as efficient and effective as possible.

If you have any questions on how to use it or the content within then contact one of the members of our team who will happily discuss this with you. You can also use these few top tips to help you get the most out of your search.

Search options

Search the 3M Chemical Test Library by chemical name, CAS number, 3M™ Protective Coverall or click 'see all' to list all available chemical data.

Use the dynamic links within the libraries tables to click on a product, chemical or CAS number. You can move through the results pages by clicking through the tables quick links as items of interest arise. Click the new search button at any time to start again.

During your search you can use the 'back' button to move to the last page you were on and avoid having to start a new search again.

Use the 'start a new search' button to return to the 3M Chemical Test Library homepage quickly and start a fresh search.

Unsure of how to spell your chemical?

Type 3 or more letters and the library will provide some suggestions as to what you may be looking for in a handy dropdown list.

If you are searching for a chemical and the name or synonym is not showing, try searching for it under the CAS number in case the phrase is not in the Chemical Test Library dictionary.

CHEMICAL	CAS NUMBER	PRODUCT	TEST TYPE	TEST METHOD	
2-Chloroethanol 99%	928-06-6	C ₂ H ₅ NO ₂	Liquid	Non Combustible	ADD +
2,4-Difluoroaniline 99%	967-25-9	C ₆ H ₃ F ₂ N	Liquid	Combustible	ADD +
2-Chloroethanol 99%	107-07-3	C ₂ H ₅ ClO	Liquid	Combustible	ADD +
2-Ethylhexanoic Acid 99%	149-67-5	C ₈ H ₁₆ O ₂	Liquid	Combustible	ADD +

Don't have the full CAS number?

Type 3 or more characters and the library will provide some names of chemicals fitting those CAS Number digits in a handy dropdown list for you to review.

NAME	CAS NUMBER	FORMULA	PHYSICAL STATE	FLAMMABLE	COMPARE
1-methyl-2-pyrrolidone	872-50-4	C ₅ H ₉ NO	Liquid	Combustible	X
2-2-aminoethoxy ethanol 98%	928-06-6	C ₂ H ₅ NO ₂	Liquid	Non Combustible	ADD +
2,4-Difluoroaniline 99%	967-25-9	C ₆ H ₃ F ₂ N	Liquid	Combustible	ADD +

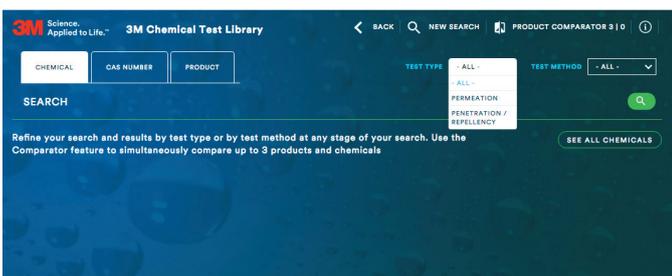


Cannot find your chemical or CAS number?

If you have searched the database and not found the chemical or test type you desire then contact 3M and tell us. Sometimes results are not included as it is not possible to test every chemical as either they will not withstand the test before evaporating, or the laboratories will not test it as part of their risk assessment and safety precautions for their staff. It maybe that we haven't had the opportunity to add it to our collection yet. Whatever the reason we can let you know and work together on finding the right solution for you.

Only interested in EN or ASTM data?

No problem! We want to provide you with as much content as possible, but you can easily and quickly refine the search to show only the test types you want. Click the Test Types filter on the library search homepage, or you can refine the search on the results page using the filter above the table. The filter will stay on for the rest of your session or until you take it off.



Only interested in penetration and repellency tests or permeation testing?

No problem! We want to provide you with as much content as possible, but you can easily and quickly refine the search to show only the test methods you want.

Click the Test methods filter on the library search homepage, or you can refine the search on the results page using the filter above the table. The filter will stay on for the rest of your session or until you take it off.

Want to adjust the order of the data in the table to see your relevant element first?

This is easy to do using the title arrows in any of the tables within the library. Simply click the arrow next to your desired heading and you can adjust the order of the data in any of the columns. For example, if you click the arrow next to BT you can change the order of the table to have the highest, or the lowest, BT as your top result.

Want to know a little more about the chemical or product being shown?

Click the 'Chemical Detail' or 'Product Detail' buttons on the results page and a pop up will appear with a few key points about that item. There are also smaller prompts with extracts of this data within the table itself, click the green 'i' next to a product or a chemical in the results table, a pop up with single product statement or physical state and hazard type classification of the chemical will appear.

Want to see more product information?

The 3M Chemical Test Library is first and foremost about the chemical testing available on the 3M™ Protective Apparel range, however, you may want to see more information on the coveralls themselves. Simply scroll to the bottom of the page and click the Product Catalogue button. The online catalogue of 3M protective apparel will open in a new page for your perusal and will not disturb your search within the 3M Chemical Test Library. Additionally, you can visit the 3M™ Protective Apparel home page for more product and range information.

Want to share the information within the 3M Chemical Test Library with a colleague?

There is a 'Send by Email' button on each chemical results page, product results page and also on the product comparator feature. Simply click the email button and a pop up will appear for permission to use your current email account. Click accept and then a link to the specific page you are on appears in an email, all you need to do is add the recipients email address and any additional message you want! There is no limitation to whom you can send it to, your colleague, safety officer or even yourself.

CHEMICAL NAME	TEST METHOD	BT	BT	BT	BT
Acrylamide 50% solution	EN 374-3:2003 - Permeation	> 480 mins	Class 1/2	-	-
Acetone	ASTM F739-99a - Permeation	< 1 mins	0*	-	-
Acetone	EN 374-3:2003 - Permeation	< 10 mins	0*	-	-

Want to compare coveralls and their results against each other?

To make it as accessible as possible we have included a few ways to do this. You can either click the 'product comparator' button which is a fixed feature at the top of each page (next to the back and new search button). Or you can click the 'compare' button which is located at the bottom of the results table on a chemical or products results page. Both of these buttons will give you a clean comparator view, allowing you to choose and add the products and chemicals you want. Alternatively, you can add products and chemicals to the comparator as you search the library. Simply click the 'add' button in the results table on the chosen chemical or product and it will add it to the comparator and a quick pop up will confirm what you have added. When you are ready click the compare button (or the fixed feature product comparator button) and you can review your chosen product and chemical results side by side. You can compare up to 3 products and 3 chemicals with multiple test types.

CHEMICAL NAME	TEST METHOD	3M™ PROTECTIVE COVERALL 4515		3M™ PROTECTIVE COVERALL 4510		3M™ PROTECTIVE COVERALL 4520	
		BREAK THROUGH TIME (BT)	CLASS / RESULT	BREAK THROUGH TIME (BT)	CLASS / RESULT	BREAK THROUGH TIME (BT)	CLASS / RESULT
1-methyl-2-pyrrolidone	-	-	-	-	-	-	-
2-Chloroethanol 99%	ASTM F739-99a - Permeation	-	-	Mean 6 mins	Class 4	Mean 4 mins	Class 4
2-Chloroethanol 99%	EN 374-3:2003 - Permeation	-	-	> 480 mins	Class 6*	-	-
2-Chloroethanol 99%	ISO 6529:2001 - Permeation @ 0.1 µg/cm²/min	-	-	Mean 0 mins	Class 0	Mean 0 mins	Class 0
2-Chloroethanol 99%	ISO 6529:2001 - Permeation @ 1.0 µg/cm²/min	-	-	> 480 mins	Class 6*	-	-
Acrylic Acid 99%	ASTM F739-99a - Permeation	-	-	Mean 3 mins	Class 3	Mean 3 mins	Class 3
Acrylic Acid 99%	EN 374-3:2003 - Permeation	-	-	< 10 mins	Class 0*	-	-
Acrylic Acid 99%	ISO 6529:2001 - Permeation @ 0.1 µg/cm²/min	-	-	Mean 3 mins	Class 3	Mean 2 mins	Class 3
Acrylic Acid 99%	ISO 6529:2001 - Permeation @ 1.0 µg/cm²/min	-	-	Mean 10 mins	Class 0*	-	-

The results listed are based on the lowest performing component's results and may not be reflective of the performance of the whole garment or other components. Breaththrough times do not indicate a safe wear time - this depends on the application, toxicity & exposure conditions. Contact 3M or a safety professional for further information.

If you don't see your chemical or have questions around correct suit selection, contact our technical team. Visit our Product Catalogue for further information on our range.

CONTACT US PRODUCT CATALOGUE

Need more information on what the tests mean and how they are performed?

Download a copy of the 3M Chemical Test Guide for review. Additionally, you can contact a safety professional or a member of 3M who will be happy to discuss how the tests are done and the importance of technical performance and compliance.



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To find out more about testing or to discuss which solution may best meet your needs contact a 3M representative. You can also visit the 3M Chemical Test library on <http://go.3M.com/CHTL> to review the chemical protective properties of the fabrics used in our range and see which 3M™ Protective Apparel solution could best meet your needs.

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