

Notification by the Disinfectants Commission  
of the German Association of Applied Hygiene (VAH)



## **Volume specification for VAH listing of hygienic hand disinfectants**

Status: 1 November 2021

### **Application of hygienic hand disinfectants**

For safe application of hygienic hand disinfection, the product efficacy, adherence to the contact time and complete wetting of the hands over the contact time are of paramount importance. Because of different hand sizes and the skin characteristics of the users, the required volume for complete wetting can vary over the contact time. For that reason no volume specification has been prescribed in the VAH Disinfectants List up to now and complete wetting over the entire contact time (30 sec or 60 sec) has been assumed.

### **Simulated-use testing with subjects**

For simulated-use testing of the efficacy of hygienic hand disinfection, *VAH Method 11* [1] and DIN EN 1500 [2] stipulate that the procedure to be tested must not be inferior to the reference procedure.

For the reference procedure propan-2-ol 60 vol. % with a contact time of 60 sec is specified. The volumes applied are 2 × 3 ml, of which 3 ml is applied at the beginning and a further 3 ml portion after 30 sec. This ensures complete wetting of the hands without drying out over the prescribed contact time.

The test procedure is carried out according to the manufacturer's instructions. The quantity (volume) of product to be used and the contact time are specified by the manufacturer and must be strictly adhered to. Essentially, only 30 sec and 60 sec are specified as practicable contact times.

In the past, 3 ml portions have proved effective because experience from the reference procedure has confirmed complete wetting of the subjects' hands over the 30 sec contact time.

This fact has also had implications for the design of manual and automated dispensing systems and has resulted in dosing quantities of 1.5 ml for manual (2x actuations of the dispenser) and 3 ml for automated dispensing systems. Recently, hand disinfectant test reports have increasingly included volume specifications that deviate from the 3 ml portions and prescribe 4 to 6 ml portions for subjects when testing the test products. This means that the efficacy of these products was only confirmed in the test if the amount of disinfectant specified in the report was applied to the subjects' hands.

The VAH would like to take this fact into account because it can also affect product efficacy in everyday practice. Therefore, in future all hygienic hand disinfectants will be featured in the VAH List together with the specified volume.

If amounts other than 3 ml are specified, adequate wetting of the hands with the existing dispensing systems over the entire contact time should be verified. If this is not the case, the dispensing systems must

be calibrated to ensure that adequate wetting of the hands can be assured with the disinfectant portions dispensed. This also applies to all procedures for which no volume specifications have been prescribed so far. **From now on, the volume will be specified on the certificate and in the VAH List for new applications or recertification of hand disinfectants.**

## References

1. Desinfektionsmittel-Kommission im VAH (Hrsg.). Requirements and Methods for VAH certification of chemical procedures. (2015). mhp Verlag: Wiesbaden. [https://vah-online.de/files/download/ebooks/eBook\\_VAH\\_RequirementsandMethods.pdf](https://vah-online.de/files/download/ebooks/eBook_VAH_RequirementsandMethods.pdf)
2. Chemical disinfectants and antiseptics – Hygienic handrub - Test method and requirements (phase 2, step 2); DIN EN 1500:2017-10.

## Contact

Verbund für Angewandte Hygiene (VAH) e.V.  
c/o Institut für Hygiene und Öffentliche Gesundheit  
der Universität Bonn  
Venusberg-Campus 1  
D-53127 Bonn  
E-mail: [info@vah-online.de](mailto:info@vah-online.de)  
Webseite: [www.vah-online.de](http://www.vah-online.de)  
Tel: 0049 (0)228-287 1 4022  
Fax: 0049 (0)228 287 1 9522

### Cite as:

Desinfektionsmittel-Kommission im VAH (ed). Volume specification for VAH listing of hygienic hand disinfectants. 1 November 2021. Available from <https://vah-online.de/en/expertise>

Authorized translation of the original publication in German:

Volumenangabe bei der Listung von hygienischen Händedesinfektionsmitteln. Stand: 1. November 2021. HygMed 2021;46(11):242-243. Available from <https://vah-online.de/de/vah-mitteilungen>

### Translation:

Sarah Venkata, M.Sc., Medical Linguist, Science Writer, London

For further information, please visit our websites: <https://vah-online.de/en/for-manufacturers>, <https://vah-online.de/en/for-laboratories>

<i>Members of the Disinfectants Commission:</i> Dr. B. Christiansen (Vice-Chairperson) Dr. M. Decius Priv.-Doz. Dr. M. Eggers Prof. Dr. M. Exner (Chairperson) Dr. J. Gebel (Secretary) Dr. S. Gemein Priv.-Doz. Dr. S. Gleich Dr. B. Hornei Dr. B. Hunsinger Prof. Dr. A. Kramer Prof. Dr. H. Martiny Priv.-Doz. Dr. F. Pitten Priv.-Doz. Dr. K. Schröppel Dr. I. Schwebke Dr. J. Steinmann Assoc.-Prof. Priv.-Doz. Dr. M. Suhomel Dr. J. Tatzel Prof. Dr. L. Vossebein Prof. Dr. C. Wendt Prof. Dr. M. H. Wolff	<i>Guests:</i> P. Ahl, Clinical Pharmacist (guest for ABDA) Priv.-Doz. Dr. Ch. Brandt (guest for DGHM) Dr. F. Helm (guest for Bundeswehr) Dr. A. Jacobshagen (guest for BfArM) I. Klöckner (guest for VHD) K. Konrat (guest for RKI) A. Marcic (guest for MSGJFS Schleswig-Holstein) Prof. Dr. U. Rösler (guest for DVG) Dr. U. Teichert (guest for BVÖGD) Dr. S. Walch Dr. V. Weinheimer (guest for BAuA)
---	---