

Instruction sheet – Interlaboratory Test Olfactometry 2013

Within this interlaboratory test every participant is given testing gases to be checked by the laboratories. The task for the participants is to set the value of the dilution factor at the panel threshold $\bar{Z}_{ite,pan}$, and to specify the value of the odour concentrations according to EN 13725:2003. Please consider that each measurement should follow the normal operation procedure of the laboratory.

1 General informations

The measurements of this year's interlaboratory test have been scheduled for the calendar week 26 (i.e. 24th to 28th of June 2013). Please feel free to choose your day/days of measurement within the stated period.

In case the participating laboratory has appointed an observer the package may only be opened in the presence of the observer.

The contents of the pressurized gas cans left to your measurements must not be analyzed with regard to their chemical concentrations neither before or while the test is being performed nor before the results will have been sent to the external coding institute IFEP GmbH.

2 Contents of the Package

- (1) Instruction for Use – Interlaboratory Test Olfactometry 2013 (this paper)
- (2) Appendix 1: Checklist for the observer
- (3) Appendix 2: Sequence of the test gases (existing as a printout in the package only)
- (4) Appendix 3: Questionnaire and result form
- (5) Number of samples for n-butanol: 10 (identifiable by numerical encoding); optional 3 samples for THT – Please notice our security instructions¹
- (6) 1 control valve with PTFE adapter piece for multiple use.

¹ SECURITY INSTRUCTIONS: All odorant concentrations in the pressurized gas container are well below the MAK values. The gases have to be diluted by air before inhaling. The inhalation of the undiluted gases will put your health at risk as there is no oxygen being contained in the testing gases.

3 Checklist for the observer

The appointed observer has to fill out the enclosed checklist (appendix 1). In case you did not nominate an observer please note this on this checklist (appendix 1).

4 Preparing the Samples

The testing gas has to be transferred into sampling bags in order to perform the measurement. Please use the bags you normally have in your lab (the organizer of the interlaboratory test does not provide bags.). As an adapter we provide you with 3 possible tube sizes (outside diameters: 8 mm, 6 mm and 4 mm). - Please see picture 1 and 2 –



picture 1: Adaptation pieces with outside diameter:
8mm, 6mm or 4mm (from left)



picture 2: finalised example

Please prepare the adaptation to your sampling bags using the appropriate tube size.

Each testing gas must be filled into one of the sampling bags respectively. Each individual bag has to be filled **right** before the measurement in question. The observer has to attend the opening of the package and the filling of the bags. Please flush the valve after each filling with fresh air.

Please see Appendix 2 to learn about the sequence of the measurement and hence the filling of the bags.

4.1 Filling the sample bags

- a) At first unscrew the metallic cap;
- b) After the control valve has to be screwed onto the first testing gas container. Please be cautious avoiding any damage of the thread and any canting of the valve (see picture 3-5);



picture 3



picture 4



picture 5

- c) Please open the control valve shortly (max. 1 sec). A low gas flow should be audible. If this is not the case please screw the complete valve more vigorously onto the can;
- d) Now you may connect the sampling bag with the adapter pieces and the valve;



picture 6: Sampling bag connected to gas can

- e) Fill the bag by opening the control valve. The pressurized gas can supplies about 12 litres;
- f) Please close the control valve;
- g) Disconnect the sampling bag, please;
- h) Unscrew the control valve and flush it with fresh air.

Now the first sample is ready for being measured. The odour concentration is to be determined following the standard EN 13725:2003. Please enter the result into the result form (appendix 3). Having completed this measurement please proceed with the next following testing gas in the same way. (Please see appendix 2 for the sequence of measurements)

The observer has to attend the record of the measuring results into the result form. (appendix 3)

In case no observer has been appointed the above mentioned laboratory's obligations towards the observer do not apply.

4.2 Storage of the Testing Gases

The testing gases should be stored at room temperature (18° - 23°C) after arrival.

5 Results

The results of the measurements have to be recorded on the result form (Appendix 3)

6 After the measurement

All participants send the result documents to the IFEP GmbH (external coding institute) please subject heading: ILC 13725 Odournet - 2013:

- by post: IFEP GmbH
Daimler Str. 8
45770 Marl
Germany
- by Fax: +49 (0) 23 65 / 2090035
- per email (Attention! please, scan and sign the documents): ifep@online.de

In order to guarantee a proper evaluation the following fully completed documents of all participants are needed:

1. Appendix 1: Checklist for the observer
2. Appendix 3: Conclusion form
3. Print-outs of the olfactometrical measurements (raw data)

Please transmit the testing results together with the filled in documents as soon as possible after having done the actual measurements completely or **until July 12, 2013** at latest.



The pressurized gas containers are disposable, and can be disposed when they are quite empty. Please adhere to the legal regulations of your country. The empty pressurized gas containers are normal waste, they are not hazardous waste.

The final results will be delivered until September 13, 2013 at latest.

For any questions please contact us:

Phone: +49 431 22012-0

Email: bmaxeiner@odournet.com

We wish everyone a successful participation in this interlaboratory test 2013!

Yours

Odournet Team



Appendix 1 Checklist for the Observer



The participants are given the opportunity to nominate an independent observer for this interlaboratory test 2013. We kindly ask you to fill this checklist in, to sign it and to send it back to us.

1. Did you nominate an independent observer?

☐ Yes, our company/ body _____ has nominated an observer (please proceed with number 2)

☐ No, our company/ body _____ did not nominate an observer (please proceed with number 7)

The numbers 2 to 6 are to be filled in by the observer **only**.

2. The observer attended the first-time opening of the package coming with the interlaboratory test in olfactometry 2013.

☐ Yes ☐ No

3. The observer was present when each single sample has been transferred duly into its sample bag.

☐ Yes ☐ No

4. Every single sample has been transferred just directly before the measurement.

☐ Yes ☐ No

5. The observer has been shown the resulting raw data after the measurement, and he checked their transfer to the result list (appendix 3).

☐ Yes ☐ No

6. Comments:

Name and company of observer (in block letters): _____

date: _____ signature (observer): _____

7. Date: _____ signature (Measuring Leader): _____

(Attention please. Only in case **no** observer had been nominated number 7 has to be filled in.)

Please fill in both this questionnaire and the resulting list of the interlaboratory olfactometrical test 2013 completely.

1. General statements

1.0	Name of company/body	
1.1	Contact person	
1.2	Phone	
1.3	Email	
1.4	What olfactometrical standard (guiding principle) are you executing?	
1.5	What presentation method is applied? (Y/N: Yes/No method or FC: Forced Choice Method)	<input type="checkbox"/> Y/N <input type="checkbox"/> FC
1.6	Is your lab accredited to EN ISO/IEC 17025 including the measurements according to EN 13725:2003?	<input type="checkbox"/> Yes <input type="checkbox"/> No
1.7	How many samples are measured in your laboratory per year? (optional information)	

2. Results

To conduct this interlaboratory test you are provided with 10 testing gases 1-butanol. The odour concentrations are to be determined. Every participant ought to generate one resulting value per delivered testing gas. The result will be rounded to the nearest whole number. The sequence of the samples can be seen from appendix 2 of the instruction sheet. Optional 3 samples of THT may be tested.

	Sample Identification No.	Date of measurement	Result of olfactometrical measurement
Sample 1 (1-butanol)			
Sample 2 (1-butanol)			
Sample 3 (1-butanol)			
Sample 4 (1-butanol)			
Sample 5 (1-butanol)			
Sample 6 (1-butanol)			
Sample 7 (1-butanol)			
Sample 8 (1-butanol)			
Sample 9 (1-butanol)			
Sample 10 (1-butanol)			
Sample 11 (THT) – optional			
Sample 12 (THT) – optional			
Sample 13 (THT) – optional			

I, as the person responsible for the measurement, herewith confirm that the interlaboratory test in olfactometry 2013 has been executed under the terms of the enclosed instruction sheet (I-AA01b-08).

Date: _____ Name: _____ Signature: _____