

# Focus on BGIA's work

Institut für Arbeitsschutz der Deutschen Gesetzlichen Unfallversicherung

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## GESTIS International Limit Values database

### Problem

The most diverse substances, substance mixtures and formulations are encountered at workplaces throughout trade and industry. The employer is obliged to assess the risk to which an employee is exposed during the performance of his or her tasks. Workplace limit values are an important aid for the assessment of risks. Since such limit values do not exist in Germany for all substances, use is also made of limit values from other countries, where available, as a supplementary aid in risk assessment.

In the past, it was difficult to ascertain what atmospheric limit values, if any, were available for a particular substance in other European countries or, for example, in the USA, since the lists had to be consulted individually. A database was to enable the data to be found more rapidly.

### Activities

A joint project conducted by European OH&S institutes as part of the EU project under the heading "Analytical methods for chemical agents" resulted in the formation of a working group which set itself the objective of compiling an up-to-date overview of the atmospheric limit values. Representatives of the Schweizerische Unfallversicherungsanstalt (Suva), the American National Institute for Occupational Safety and Health (NIOSH), the Institut de recherche Robert Sauvé en santé et en sécurité du travail (IRSST) (Quebec, Canada) and the Toyo University (Japan) also joined the group.

Substance	CAS No.	Limit value - Eight hours		Limit value - Short term	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Benzene	71-43-2				
Austria		1	3,2	4	12,8
Belgium		1	3,25		
Canada - Québec		1	3	5	15,5
Denmark		0,5	1,6	1,0	3,2
European Union		<b>1</b>	<b>3,25</b>		
France		<b>1</b>	<b>3,25</b>		
Germany (AGS)		1	3,25		
Germany (DfG)					
Hungary					3
Italy		1	3,25		
Japan		10			
Spain		1	3,25		
Sweden		0,5	1,5	3	9
Switzerland		0,5	1,6		
The Netherlands			3,25		
USA - OSHA		1		5	
United Kingdom		1			
<b>Remarks</b>					
Austria		TRK value (based on technical feasibility)			
European Union		Bold-type: Indicative Occupational Exposure Limit Values [2,3] and Limit Values for Occupational Exposure [4] Bindung Occupational Exposure Limit Value - BOELV (for references see <a href="#">bibliography</a> )			
France		Bold type: Restrictive statutory limit values			
Italy		skin			

Display of all atmospheric limit values for benzene in the database

Under the overall responsibility of the BGIA, a database was created containing atmospheric limit values from eleven European countries and the USA, Canada (Quebec), Japan and also the EU limit values. To date, only atmospheric limit values which are binding in nature in the countries concerned have been gathered. The database is to be extended continually and updated at yearly intervals.

## Results and Application

The GESTIS International Limit Values database is accessible (in English) to the public at [www.dguv.de/bgia/gestis-limit-values](http://www.dguv.de/bgia/gestis-limit-values). Information on over 1250 hazardous substances, mixtures and formulations can be searched for by substance name and CAS number. Since the substance names cannot be related unambiguously to a particular substance in all cases, the CAS number is recommended as the initial search criterion. The substance data sheets contain specific information on:

- Atmospheric limit values
- Short-time limit values
- Particle fractions to which the atmospheric limit value relates (in the case of particulates)

## Area of Application

Employees and employers in all areas of industry; production plants, workshops; agricultural and construction enterprises, and all other sectors; initial and further training; prevention; investigation into cases of occupational disease; assessment of working areas.

## Additional Information

- [www.dguv.de/bgia/gestis-limit-values](http://www.dguv.de/bgia/gestis-limit-values)

## Expert Assistance:

BGIA, Division 2: Chemical and biological hazards

### “Focus on BGIA's Work”

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