

# NEWSLETTER

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*This Newsletter is a periodic publication of DOHSBASE vof and appears at least at each update of the software DOHSBase Compare.*

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## UPDATE 2012-02: NEWS & DEVELOPMENTS

This first English DOHSBase Compare Newsletter appears simultaneously with the distribution of the DOHSBase Compare EU-Xtend update 12-02.

DOHSBase Compare has grown over the last 20 years to one of the worlds largest database program with chemical substances, physical, chemical and hazard information, health based Occupational Exposure Limits (OEL's) and measurement methods. The update 2012-02 is distributed somewhat earlier due to the many developments since December 2011, including REACH. Also the database has expanded in the last months in numbers, substance properties, OEL's and analytical methods.

The 12-02 update includes over 5,000 substances that were registered in REACH before December 2010, because they are being used over 1000 tons/year or are especially hazardous. Through a web-link in the tab Limit of DOHSBase Compare the ECHA Dissemination Database with information on Classification & Labeling hazard, DN/MEL and Chemical

Safety Report (CSR) can be consulted and compared with the existing information in DOHSBase. Furthermore, the first Derived No or Minimal Effect Levels (DN/MEL's) are included in DOHSBase Compare as exposure limits.

The numbers in this EU update are:

Description	Number
Substances	170.000
Synonyms	224.000
Health based Limit Values:	7.800
• European	4.350
• Rest of the world	2.250
• Kick-off values	1.200
• Biological monitoring	900
Measurement methods	2.800
Bruto molecular formula	26.000
2-dimensional structure	18.000

All in all, this update shows again a significant increase in the number of substances for which a limit value and/or a measurement method is established. For more information see the file 'readme1202.txt' in the installation package.

### Content:

- New website
- Workshop September 25, 2012
- REACH
- Measurement Methods
- Administrative Limit Values
- Kick-off Limit Values

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## New Website:

### Changed and Improved

In recent months, our website (<http://www.dohsbase.nl/en/>) is taken in hand and completely renewed. Not only the layout has changed, but also the content is updated and improved.

The website will take a greater role in our communication with customers and other interested parties. Take a look!

## September 25, 2012: Workshop

On Tuesday, September 25, 2012 we will again organize a one day Workshop Exposure Assessment with DOHSBase Compare, the BOHS/NVvA Compliance Testing Guidance and the use of the statistical package HYGINIST.

In the Workshop, the background of both applications is on the agenda, but also the derivation of kick-off limits and the use of the Compare mode. There is much room for exercise and interaction.

Hobéon-SKO has awarded the participation in this workshop with 1 certification point for the Dutch maintenance system of occupational hygienists (SAH) and Safety Supervisors (SVK).

The workshop will be held in Utrecht, centrally in the Netherlands, near the Central Station. The cost is € 650.00 excluding VAT.

The workshop can be given in English as well.

More information is on our website [www.dohsbase.nl](http://www.dohsbase.nl). You will find also the Registration Form (in Dutch). Alternatively, mail to [geert.wieling@dohsbase.nl](mailto:geert.wieling@dohsbase.nl).



## DOHSBASE COMPARE & REACH

For substances with a CLP-hazard classification and an obligation to produce a Chemical Safety Report (CSR), a Derived No-Effect Level (DNEL) or Derived Minimal-Effect Level (DMEL) for workplace atmosphere and skin absorption in may be found in the public database the ECHA. It is our intent to present in future updates these largely administrative DN/MEL- values (i.e. with standard safety factors extrapolated from animal studies), because it are sometimes substances without public health limits, or because the hazard assessment of the producer/importer has led to a different Exposure limit level. We have contacted ECHA and other stakeholders to include all the no-effect levels (DNEL) and Minimal effect levels (DMEL for carcinogens) in the coming updates of DOHSBase Compare.

By way of trial, the DM/NEL 's for the worker as defined in the framework of REACH (there are also DN/DMEL's aimed at other target groups), of 4 compounds (Benzene, Ethylene Oxide, Melamine and Methylamine) are included in this update.

The developments of the European REACH-program, implemented by the Finland based agency ECHA, are closely followed. The 135,495 substances that are indicated as manufactured or marketed in Europe are included in our software.

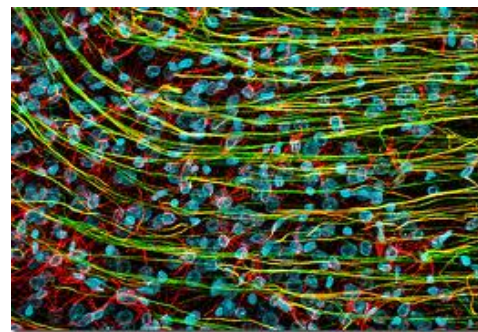
The 2,500 substances, which are subject to registration in 2013, are earmarked so that the development of a company limit can take into account a possible DNEL or DMEL in 2013.

Not all chemicals that occur in the workplace are covered by REACH and in REACH not all substances get a DN/MEL. There are quite a few substances exempted from registration or the obligation to make exposure assessment

because they have been assessed as harmless, naturally occurring, used only in closed systems (intermediates), or they belong to the so-called private domain (no producer/importer, not intentionally produced, decomposition products). Also there are many substances under other laws (such as substances with ionizing radiation levels, biocides and pharmaceuticals), which are without an OEL or the obligation to derive a DN/MEL.

Of the 7,500 substances that will be registered in June 2013, only a part will have a DN/MEL. We expect that the current number of over 3,300 substances in DOHSBase Compare with al limit value, with REACH it will at most double.

So, the group of non-REACH-substances and REACH -substances without DN/MEL is extensive. They can by their level of exposure still form a considerable risk at the workplace. For these substances, if relevant, company limits of public exposure limits still need to be established. For public exposure limits the procedure as is nowadays (for example by advisory reports by the Dutch Health Council or the European SCOEL) will be followed.



## MEASUREMENT METHODS

There is an international trend to establish generic measurement methods. The measurement method is then valid for multiple substances. This leads to general requirements such as US OSHA #7, whose usefulness is limited in practice.

In the United Kingdom the Health and Safety Executive replaced measurement method MDSH #60 for MDHS #72. MDHS#60 was specific aimed at mixtures of hydrocarbons, whereas MDHS#72 a collection method for individual substances is. This means that for substances as isomers of hexane, no data on the maximum volume of air are available.

In the Tab Method, the data from MDHS#60 have been maintained. We strive anyway to include expired measurement methods as PDF-documents.

## ADMINISTRATIVE EXPOSURE LIMIT VALUES

Recently we got the question why the limit limits of eg. Spain and Greece were not included in DOHSBase Compare, alongside those of the Dutch Health Council and the European SCOEL. DOHSBase Compare uses the same system as the guidelines from the Social and Economic Council of the Netherlands (SER) where health based limit values are preferred over administrative limit values.

Many European and other Western-oriented countries have their own list of limit values, which the local technical feasibility are normally invisible processed. This 'colour local information' is other than the country itself, partly accessible on the websites of the Dutch SER ([www.ser.nl](http://www.ser.nl)); database on limit values [in Dutch]) and in the database "GESTIS - International limit values for chemical agents Occupational Exposure Limits (OELs)" ([www.dguv.de](http://www.dguv.de)). In these databases there is no substantive review of the limit values, as being done in the before mentioned guidelines from the Dutch SER and in DOHSBase Compare.

## KICK-OFF LIMIT VALUES

### Update to H-statements

In 2005 we presented in DOHSBase Compare the concept of kick-off limit values, for substances without health-based limit values, but with relevant Risk-phrases (R-phrases (see also <http://www.dohsbase.nl/content-2-2-2/kick-off-grenswaarden/>)). In DOHSBase Compare kick-off limit values for about 1,100 substances are included.

The kick-off limit values are incorporated in the guidelines of the Social and Economic Council of the Netherlands (SER) [www.veiligwerkenmetchemischestoffen.nl](http://www.veiligwerkenmetchemischestoffen.nl). The Dutch Labour Inspectorate refers to the kick-off limit values in the inspections on chemical exposure.

The scientific publication on kick-off limit values by Scheffers & Wieling in the Dutch-based Journal for Applied Health Sciences dates already from 2005. The R-phrases system, however, is being abandoned in Europe and replaced by the GHS/CLP-system with H-statements. Also, by introducing the new system for standard setting in the Netherlands in 2007, the number of formally established limit values has decreased.

We have been asked what the impacts of these developments are on the kick-off limit values. This is not easy to indicate, as R-phrases are not translated 1 on 1 to H-statements. Also the grouping of the H-statements in TRGS-risk classes (which system was favorable in 2005) has been changed. A reassessment of the kick-off limits based on the H-phrases is desirable. These are the reasons for us to work in the coming period on an update of the kick-off limits values, so they are up-to-date



**DOHSBASE**  
( ( ( **C O M P A R E** ) ) )