How to procure safer disinfectants

The Vienna Database for Disinfectants WIDES

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Workshop

„Sustainable Public Procurement in European Healthcare"

First LEGAL BASIS for Ecological Procurement in Vienna

Vienna Waste Management Act

§ 10

(1) The city of Vienna is obliged …. to procure those products from the market supply, that minimize adverse impacts on the environment during production, use and disposal.

(2) As an institution of private law the city of Vienna has ……. to support those companies on the market, that produce/sell products which cause less dangerous waste in relation to similar products. .

(Translated from German by the Speaker)

"ÖkoKauf Wien"

Ecological Criteria for Public Procurement

- In 1998 the Vienna City Administration decided to purchase ALL its goods and services according to ecological considerations.
  For this purpose the programme „ÖkoKauf Wien" was implemented. (Vienna´s Budget: 5 billion Euros per year)
- A central management tool for this are eco-criteria lists (for procurement by tender)
- By executive decree, these criteria lists are binding for all departments of the Vienna City Administration over the course of public procurement and tendering.

The Structure of ÖkoKauf Wien

"ÖkoKauf Wien" at a glance

Environmentally friendly procurement

Programme Sponsor
Executive City Councillor for the Environment

Chief Executive Directory of the Vienna City Administration
Director General of Urban Planning and Development

Budget Department — **PROJECT DIRECTOR** — International Activities Department

Consultative Committee on Law

STERRING GROUP

Consultative Committee on Public Relations

Climatic Protection · Environmental Protection
Urban Planning and Development · Waste Disposal · Finance · Kindergartens · Hospitals and Care Residences · Public Procurement
Vehicle Fleet · Construction · Building Management · Vienna Ombuds-Office for Environmental Protection · Residential Management

- WG 01 Lighting
- WG 02 Disinfection
- WG 03 Printing, Paper and Office Supplies
- WG 04 Electrical Office Equipment and Household Appliances
- WG 05 Vehicle Fleet
- WG 06 Technical Services
- WG 07 Building Construction
- WG 08 Interior Decoration
- WG 09 Food and Drink
- WG 10 Cleaning Agents
- WG 11 Public Works
- WG 12 Water Services
- WG 13 Winter Services
- WG 14 Prevention
- WG 15 Planning
- WG 16 Events
- WG 17 Paints and Varnishes
- WG 18 Fire Extinguishing Equipment
- WG 19 Furniture
- WG 20 Textiles
- WG 21 Disposal Services
- WG 22 Construction Site Environmental Logistics
- WG 23 Nanotechnology
- WG 24 Kindergartens
- WG 25 Green and Open Spaces

Partner Programmes:
Vienna Climatic Protection Programme ("KliP Wien")
Programme Environmental Management in the Municipality of Vienna ("PUMA")
EcoBusinessPlan Vienna

"ÖkoKauf Wien"
Think Green — Buy Green

ÖkoKauf Wien
For Environmental and Climatic Protection
www.oekokauf.wien.at

City of Vienna
Vienna is special.

About the programme „ÖkoKauf Wien“

- More than 200 employees both inside and outside of the Vienna City Administration participate in the programme. They are organised within 26 topic-specific **working groups.**
- ÖkoKauf develops ecocriteria lists, position papers, databases for the assessment of products, and tools to evaluate our improvements.
- There are “Working Groups” for disinfection, cleaning products, food, ligthing, printing paper, building construction, textiles, events, kindergartens, nanotechnology, furniture etc.

Results are published on the website:
http://www.oekokauf.wien.at

Green Procurement guidelines

- When there has been developed an „Austrian Action Plan for Sustainable Public Procurement“ on the federation level, the results of ÖkoKauf Wien were integrated. Also our WIDES-Database is recommended in the federal Action Plan. http://www.bka.gv.at/DocView.axd?CobId=40217

- ÖkoKauf Wien has not developed general guidelines, HOW to green its public procurement. Which specific ecocriteria has to be considered to buy green, was decided by the experts in every individual Working Group. The assessment was mainly based on the adverse properties of the specific product group.

Some Results from Hospitals

- The amount of organic food increased

  from 1.5 % to 30%

- only ecological friendly cleaning products were procured with

- 10% less costs
  1996: € 647.000/year – 1999/2000: € 581.000/year

- 23% less weight
  1996: 386 Tons/year - 1999/2000: 297 Tons/year

Properties of Disinfectants

The City of Vienna procures and uses about 300 tons of disinfectants per year.

In hospitals and other hygiene risk areas disinfectants are routinely used to prevent infections and thus protect people's health. Consequently, the cell-killing properties of disinfectants are most important.

But this fact involves certain hazards for the environment and human health. They can stress sewage plants, harm water organisms, lead to skin degreasing and irritation, allergic contact eczemas, allergic asthma etc.,

Vienna Employees Protection Act

§ 7 Principles of Prevention

The City as Employer has to implement the following general principles of prevention:

1. Prevention of risks
2. Evaluating the risks, that cannot be avoided
6. Elimination or reduction of hazards;
9. Issue appropriate instructions to the staff

These principles has to be used

by designing workplaces, jobs and operations,

in the selection and use of work equipment and agents

in the use of staff as well as on any action taken to

protect the staff

The aim of our working group was

to **reduce possible risks** of disinfection measures to health and the environment **to a minimum** by carefully selecting disinfectants with a low hazard potential and/or by the well-targeted balancing of intended uses and hazardous properties.

BUT a lot of disinfectants are sold as concentrates. Depending on the specific application the dilution rate changes and also differs between the products.

That´s why the information in **Safety Data Sheets do not provide enough basis to carry out comparisons** of the diluted products “ready to use”.

This makes substitution of disinfectants difficult.

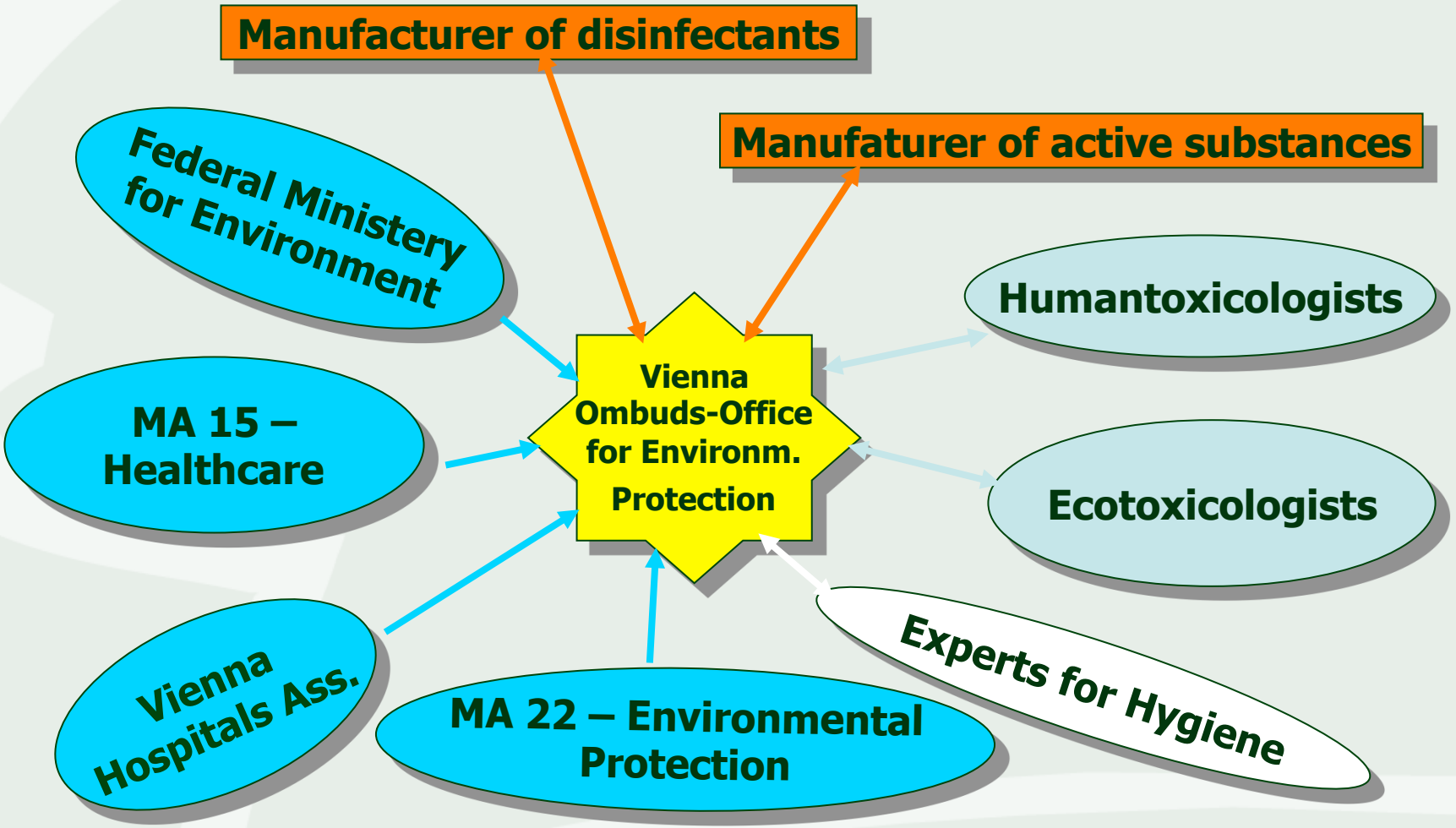
The Decision to develop a Database

That´s why we developed an easy-to-use instrument, that enables the purchaser to **compare potential adverse effects of the diluted disinfectants** (“ready for use”) and select the safest products from the market supply for each of the needed applications. (with the lowest risks for health and environment)

This can only be done by a Database.

It allows to take into account efficacy, occupational safety and environmental protection by mouse-click.

Participants of the Working Group „Disinfection“ in 1998



Later also: Occupational health experts and Pharmacists

Most important Project Partners

The *WIDES* Database has been developed by the Wiener Umweltanwaltschaft (Vienna Ombuds Office for Environmental Protection) within the framework of ÖkoKauf Wien in cooperation with

Allgemeine Unfallversicherungsanstalt (AUVA, General Accidents Insurance Corporation)

Österreichische Gesellschaft für Hygiene, Mikrobiologie und Präventivmedizin (OEGHMP, Austrian Society for Hygiene, Microbiology and Preventive Medicine)

Interuniversitäres Forschungszentrum für Arbeit, Technik und Kultur (IFZ Graz, Inter-University Research Centre for Technology, Work and Culture) – Technisches Büro Klade (Engineering Office Klade)

Wiener Krankenanstaltenverbund (Vienna Hospitals Association)

"die umweltberatung" (Association of Austrian Environmental Helpdesks)

WINGIS-online – Hazardous materials information system of Berufsgenossenschaft der Bauwirtschaft (BG Bau, the German professional association for the building industry)

The WIDES Database includes

human- and ecotoxicological data on ingredients of disinfectants, as antimicrobial substances, surfactants, solvents, etc. including source references.
(actually of 200 substances)

Data regarding the composition, spectrum of activity, applications and material compatibility of disinfectants for surfaces, instruments, laundry, hands and skin. Mainly from Manufacturers' data
(actually of 180 products are integrated)

An evaluation scheme to compare human- and ecotoxicological properties of the ingredients of the most important disinfectants available on the Austrian market.

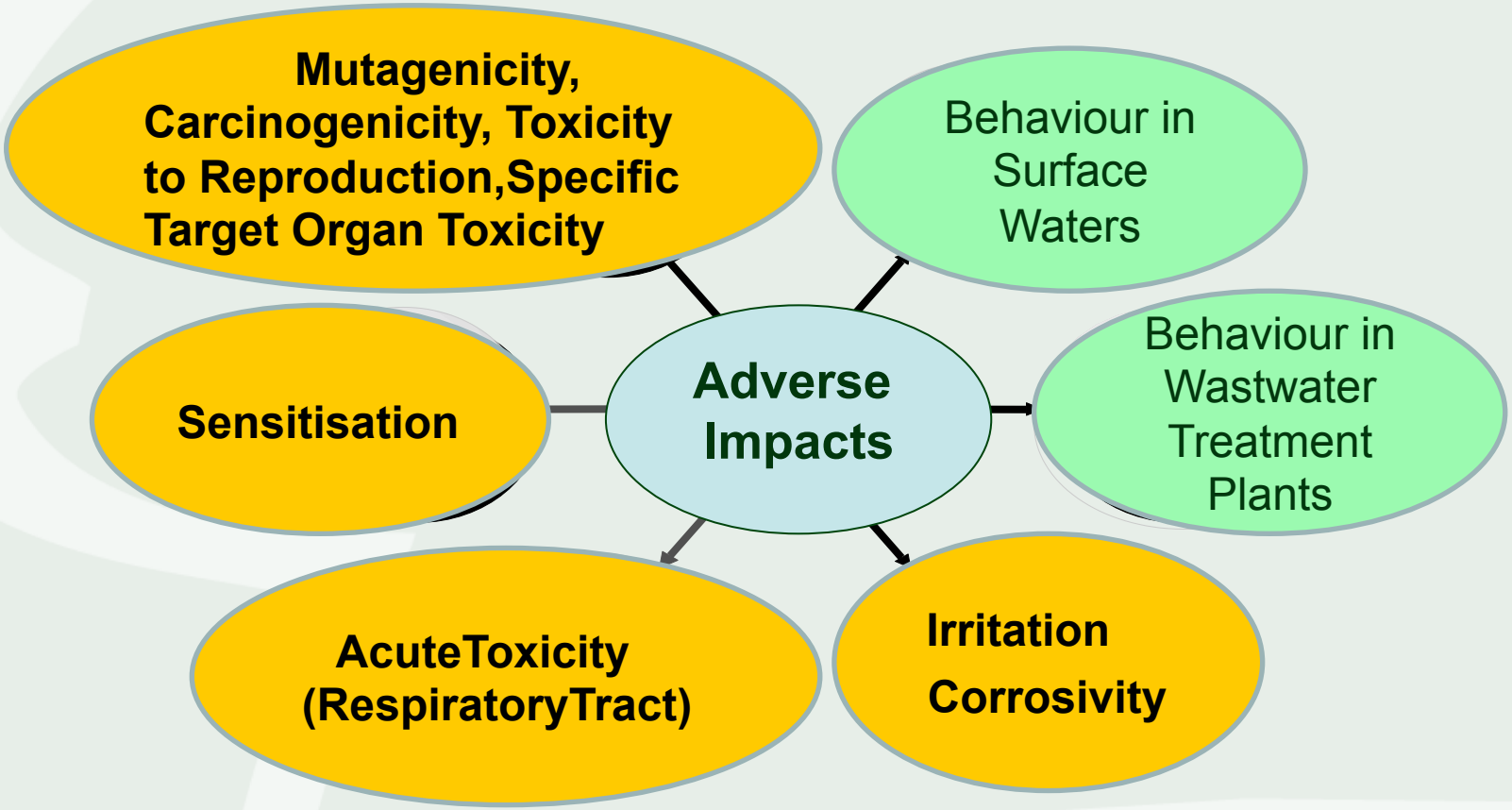
Assessment Procedure

- ***Categorising adverse impacts*** in respect to human health and the environment

- ***Substance assessment:*** Assigning appropriate assessment numbers to the ingredients (by following transparent assessment rules)

- ***Product assessment*****:** Assigning appropriate assessment numbers to the products according to an calculation model, which considers the concentration of the ingredients in the diluted or „ready for use“ products. Finally the assessment numbers are transformed into a colour code.

Assessment Procedure – Categorization of adverse impacts



The „Flammability“ is only assessed for alcoholic disinfectants.

Assessing microbicidal agents and additional ingredients

	Toxic	Skin	Sen.	CMR	Water	STP
No hazard	1	1	1	1	1	1
Low hazard	2	2	2	2	2	2
Moderate hazard	3	3	3	3	3	3
High hazard	4	4	4	4	4	4
Very high hazard	5	5	5	5	5	5

Assigning assessment numbers to corresponding hazards

No hazard statement, properly characterized

H332, 312, 302 , 304 (harmful)

H331, 311, 301 (toxic)

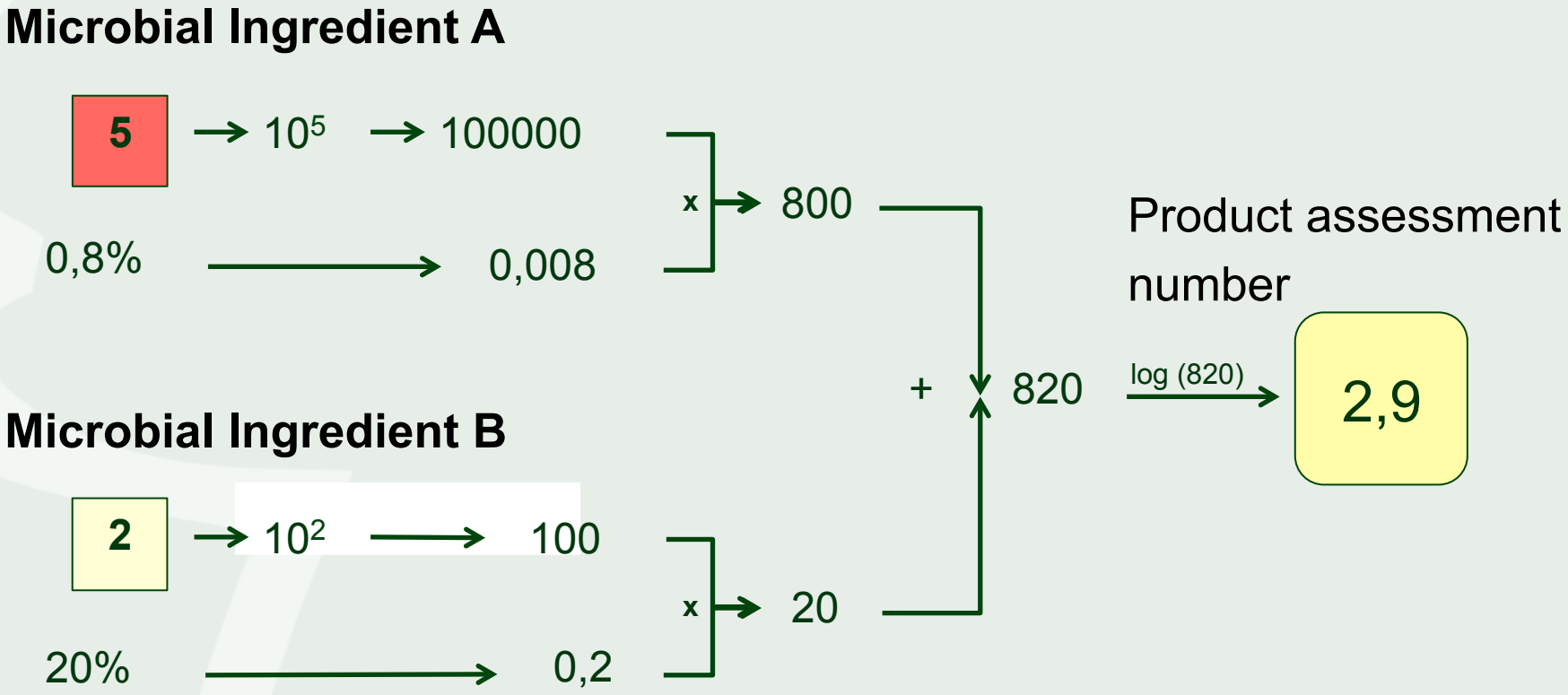
H330, 310, 300 (fatal) or:
H331, 311, 301 with H314 (toxic & causing severe burns)

H330, 310, 300 with H314
(fatal & causing severe burns)

Inconsistent or insufficient data

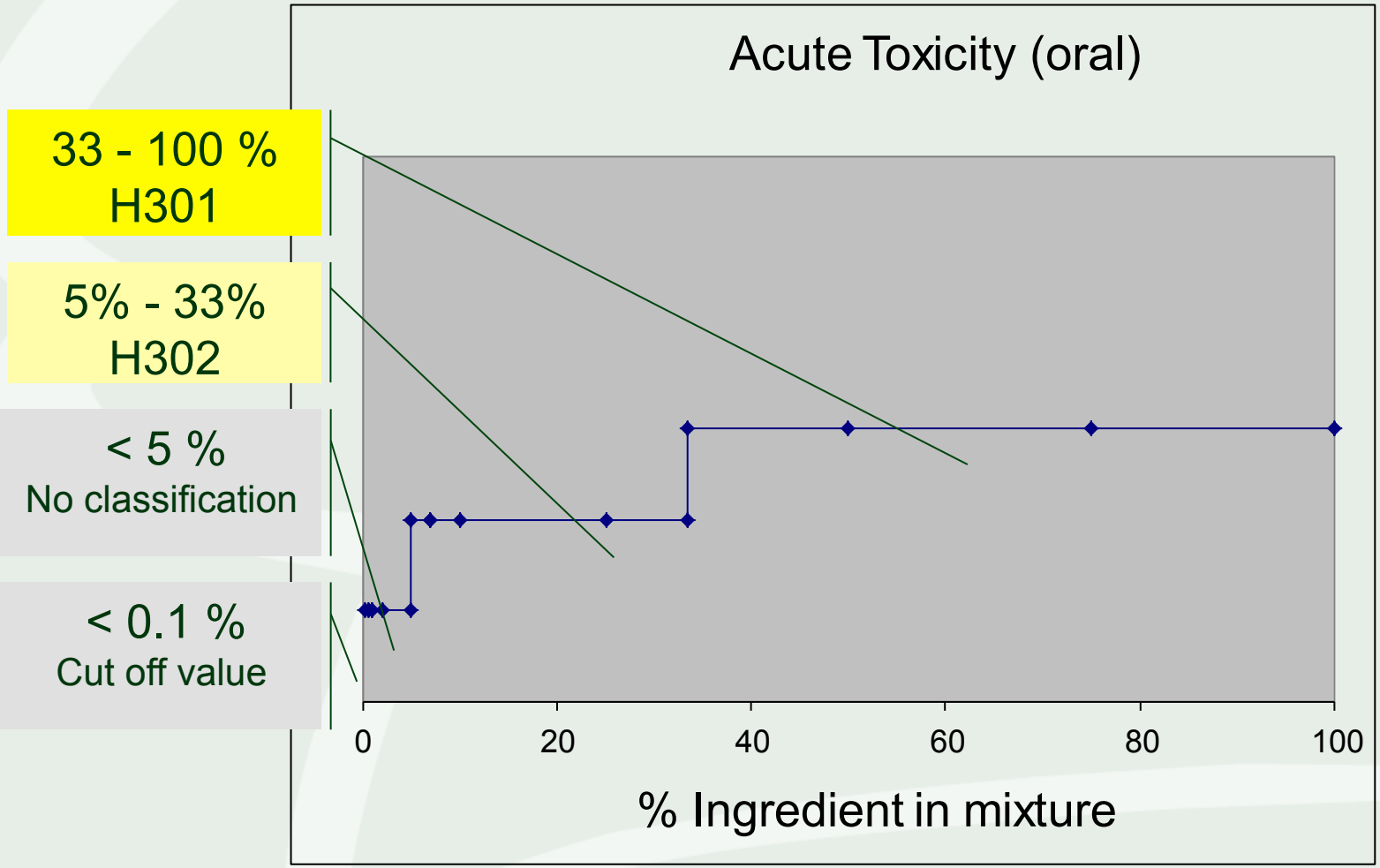
Toxicity	Skin	Sen.	CMR	Water	STP
1					
2					
3					
4					
5					
?					

Sample Calculation

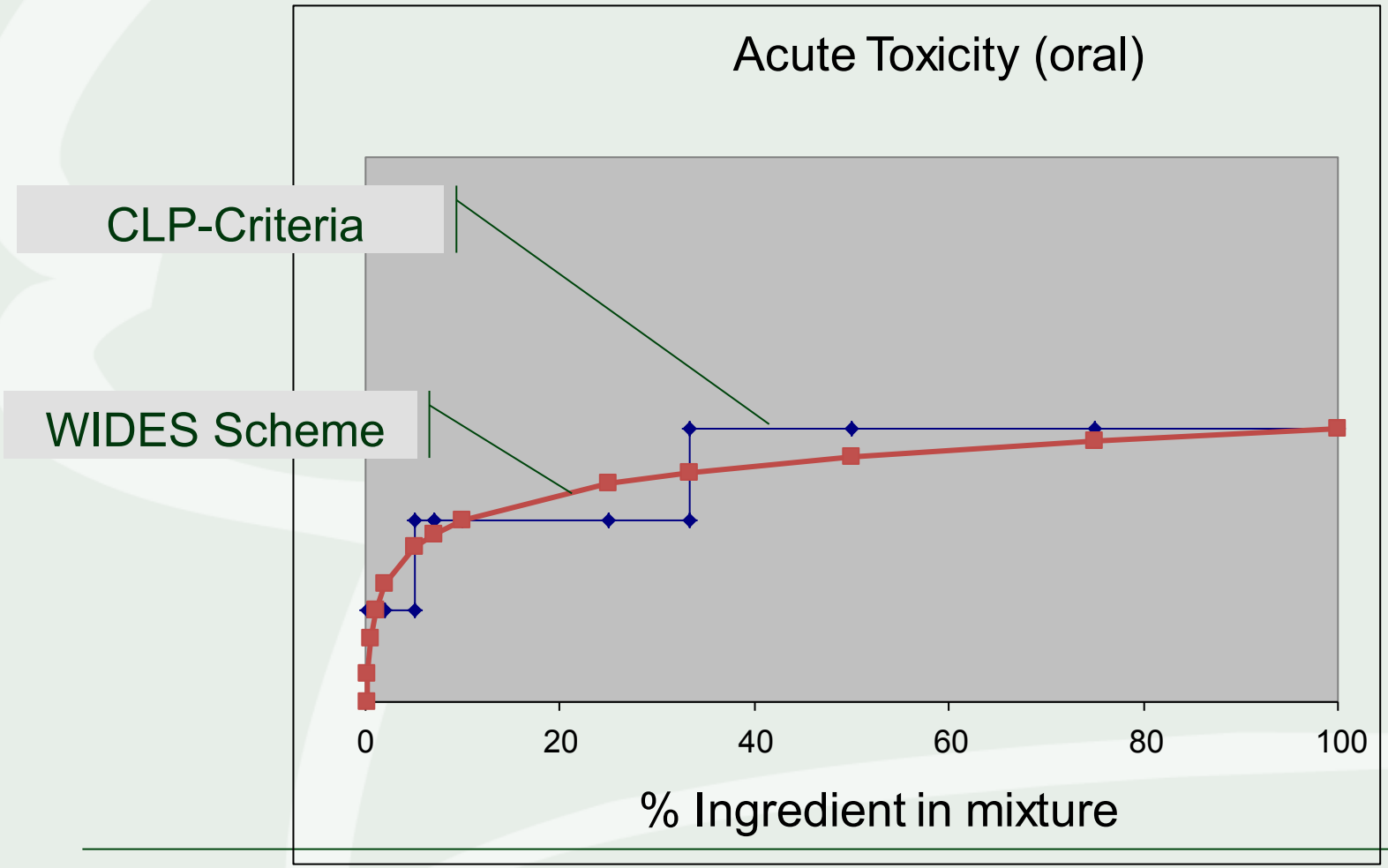


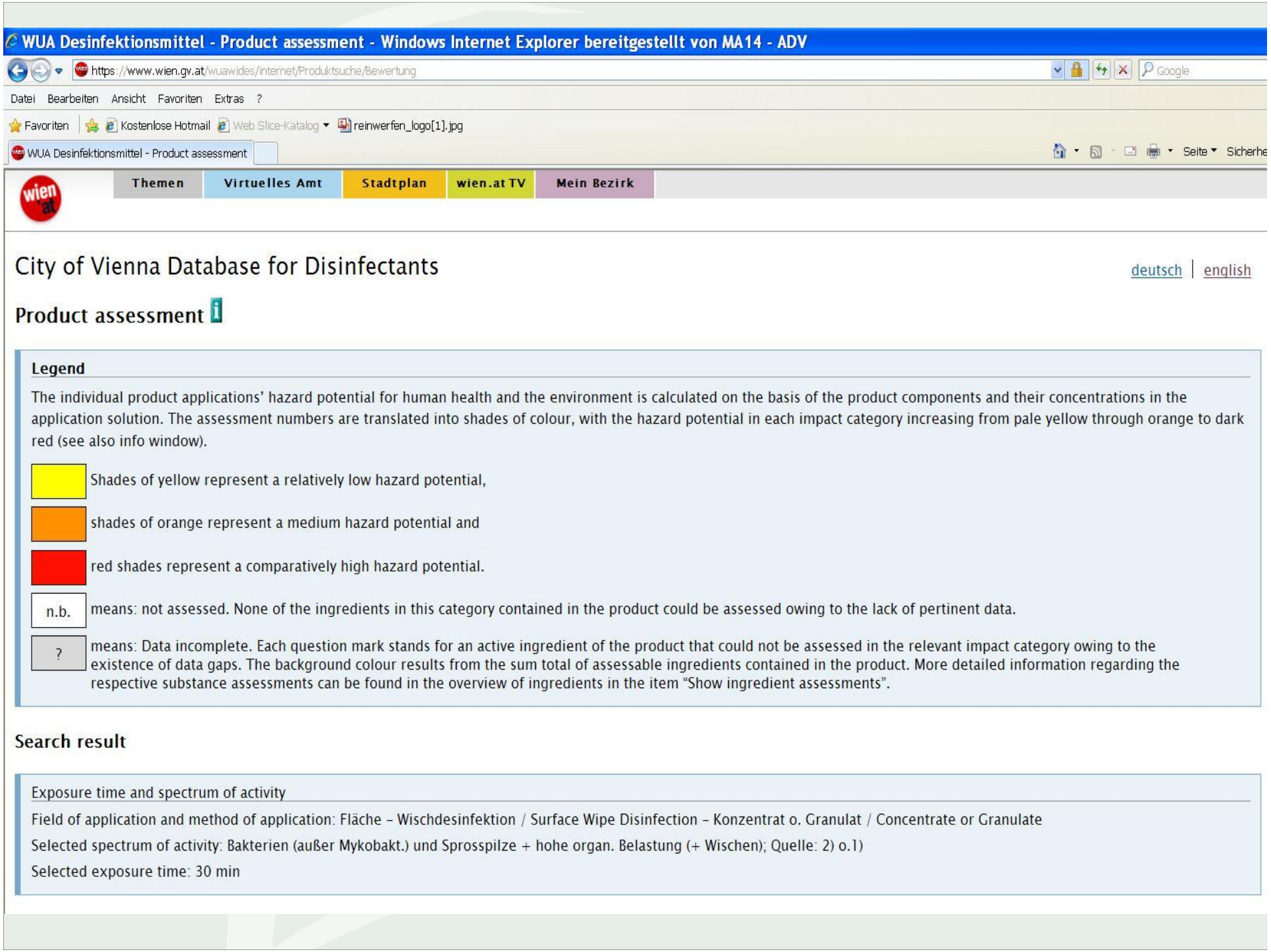
EU CLP rules for mixtures (ATE)

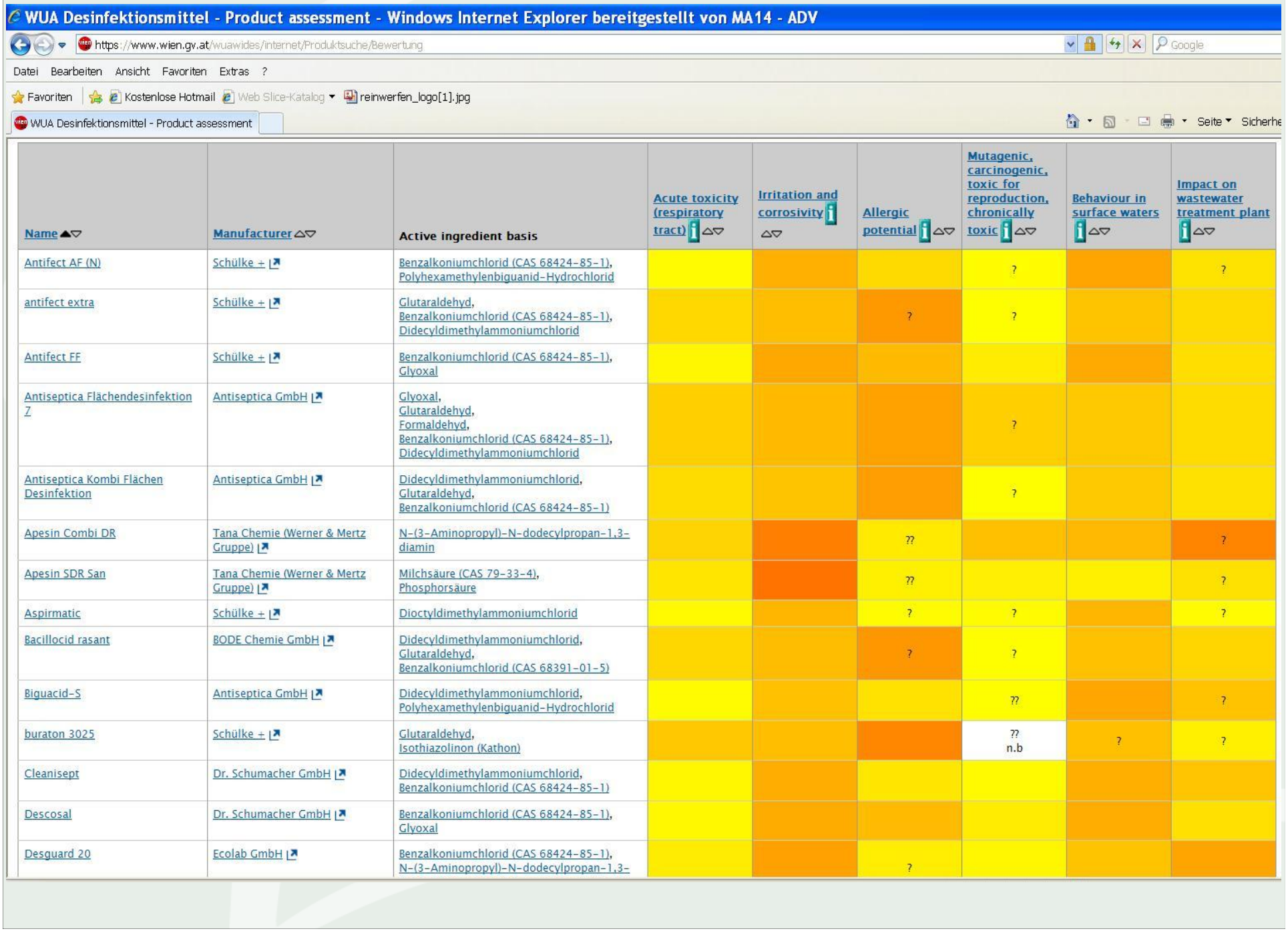
containing a toxic ingredient (H301)



CLP criteria and WIDES scheme




WUA Desinfektionsmittel - Product assessment - Windows Internet Explorer bereitgestellt von MA14 - ADV
https://www.wien.gv.at/wuawides/internet/Produktsuche/Bewertung
Datei Bearbeiten Ansicht Favoriten Extras ?
Favoriten
Kostenlose Hotmail
Web Slice-Katalog
reinwerfen_logo[1].jpg
WUA Desinfektionsmittel - Product assessment
Seite
Sicherhe
Themen
Virtuelles Amt
Stadtplan
wien.at TV
Mein Bezirk
City of Vienna Database for Disinfectants
deutsch | english
Product assessment
Legend
The individual product applications' hazard potential for human health and the environment is calculated on the basis of the product components and their concentrations in the application solution. The assessment numbers are translated into shades of colour, with the hazard potential in each impact category increasing from pale yellow through orange to dark red (see also info window).
Shades of yellow represent a relatively low hazard potential,
shades of orange represent a medium hazard potential and
red shades represent a comparatively high hazard potential.
n.b.
means: not assessed. None of the ingredients in this category contained in the product could be assessed owing to the lack of pertinent data.
?
means: Data incomplete. Each question mark stands for an active ingredient of the product that could not be assessed in the relevant impact category owing to the existence of data gaps. The background colour results from the sum total of assessable ingredients contained in the product. More detailed information regarding the respective substance assessments can be found in the overview of ingredients in the item "Show ingredient assessments".
Search result
Exposure time and spectrum of activity
Field of application and method of application: Fläche – Wischdesinfektion / Surface Wipe Disinfection – Konzentrat o. Granulat / Concentrate or Granulate
Selected spectrum of activity: Bakterien (außer Mykobakt.) und Sprosspilze + hohe organ. Belastung (+ Wischen); Quelle: 2) o.1)
Selected exposure time: 30 min



Name	Manufacturer	Active ingredient basis	Acute toxicity (respiratory tract)	Irritation and corrosivity	Allergic potential	Mutagenic, carcinogenic, toxic for reproduction, chronically toxic	Behaviour in surface waters	Impact on wastewater treatment plant
Antifect AF (N)	Schülke +	Benzalkoniumchlorid (CAS 68424-85-1), Polyhexamethylenbiguanid-Hydrochlorid				?		?
antifect extra	Schülke +	Glutaraldehyd, Benzalkoniumchlorid (CAS 68424-85-1), Didecyldimethylammoniumchlorid			?	?		
Antifect FF	Schülke +	Benzalkoniumchlorid (CAS 68424-85-1), Glyoxal						
Antiseptica Flächendesinfektion 7	Antiseptica GmbH	Glyoxal, Glutaraldehyd, Formaldehyd, Benzalkoniumchlorid (CAS 68424-85-1), Didecyldimethylammoniumchlorid				?		
Antiseptica Kombi Flächen Desinfektion	Antiseptica GmbH	Didecyldimethylammoniumchlorid, Glutaraldehyd, Benzalkoniumchlorid (CAS 68424-85-1)				?		
Apesin Combi DR	Tana Chemie (Werner & Mertz Gruppe)	N-(3-Aminopropyl)-N-dodecylpropan-1,3-diamin			??			?
Apesin SDR San	Tana Chemie (Werner & Mertz Gruppe)	Milchsäure (CAS 79-33-4), Phosphorsäure			??			?
Aspirmatic	Schülke +	Dioctyldimethylammoniumchlorid			?	?		?
Bacillocid rasant	BODE Chemie GmbH	Didecyldimethylammoniumchlorid, Glutaraldehyd, Benzalkoniumchlorid (CAS 68391-01-5)			?	?		
Biguacid-S	Antiseptica GmbH	Didecyldimethylammoniumchlorid, Polyhexamethylenbiguanid-Hydrochlorid				??		?
buraton 3025	Schülke +	Glutaraldehyd, Isothiazolinon (Kathon)				?? n.b	?	?
Cleanisept	Dr. Schumacher GmbH	Didecyldimethylammoniumchlorid, Benzalkoniumchlorid (CAS 68424-85-1)						
Descosal	Dr. Schumacher GmbH	Benzalkoniumchlorid (CAS 68424-85-1), Glyoxal						
Desguard 20	Ecolab GmbH	Benzalkoniumchlorid (CAS 68424-85-1), N-(3-Aminopropyl)-N-dodecylpropan-1,3-			?			

German Website

www.oekokauf.wien.at/desinfektionsmittel

English Website

http://www.wien.gv.at/english/environment/protection/oekokauf/disinfectants/

and www.wien.gv.at/wuawides/internet

with Google search for: Wides Database

Thank You For Your Attention

The Viennese Database for Disinfectants (WIDES Database)

The WIDES Database

- is an industry-independent information system established by the City of Vienna Climate Protection Programme ÖkoKauf Wien,
- is a user-friendly database that makes it easier for hospitals and other institutions in the health care sector to take into account effectivity, safety and environmental factors when procuring disinfectants and to ensure the safe use of these products;
- contains information on the established effects of commercially available disinfectants and their ingredients as well as the properties of these products that are of relevance for occupational safety and environmental protection.

WIDES database – Sign-on

Purpose and Function of the Database: 110 KB RTF