

# Respiratory protection guide

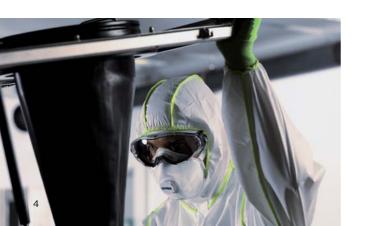






## Definition of respiratory protection:

Respiratory protection generally refers to the part of personal protective equipment (PPE) that protects the wearer from respiratory poisons and environmental pollutants. Respiratory protection is generally used in the field of occupational safety. Respiratory devices are subdivided into filtering devices and breathing apparatus. Filtering face masks filter out harmful substances from the air, while breathing apparatus provides the wearer with their own supply of oxygen independent from the ambient air. If the harmful substance is known about and there is sufficient oxygen in the ambient air (at least 17 % vol.), filtering face masks are sufficient to work with. Otherwise, breathing apparatus such as forced-air respirators or compressed air breathing apparatus must be used. Please note that when choosing and using the right respiratory protection, a detailed analysis is required of the workplace and the hazardous substances used there. You cannot make the choice based solely on the information provided here. Legislation and legal requirements must be adhered to.



## Contents:

- 6 Legal notice
- 7 Standards
- 8 Overview of applications
- 10 Period of use
- 11 Filter types
- 12 Classification of gas filters
- 14 Mask range
- 16 Hazardous substances



## Legal notice

uvex assumes no liability for any damage that may result from the use of this respiratory protection guide, and particularly not for damage to health as a result of using the respiratory protection recommended by the guide. This respiratory protection guide cannot replace a risk assessment or purchase advice.



### Standards:

The "D" symbol on the disposable face masks indicates that they meet the additional requirement of standard EN 149, the dolomite clogging test. This test checks whether the mask maintains a good level of breathing resistance after being subjected to high levels of dolomite dust. This means the "D" symbol is a quality indicator for the filter material used and ensures that a mask can be worn over a long period even at high levels of dust concentration.

The "R" symbol on a disposable face mask stands for reusable in accordance with standard EN 149. The cleanability of the masks is tested, so that the masks can also be used in a second work shift. If the mask is cleanable, it features the symbol "R", otherwise the symbol "NR" non reusable. In addition, there are also different requirements for the different protection classes concerning the seal of the masks (leakage) and other additional requirements, such as the maximum permitted level of breathing resistance. The standard always defines the minimum requirements; all uvex products significantly exceed these minimum requirements, thereby ensuring optimal wearing comfort and safety.

# Overview of applications:



Activities	Harmful substances	Protection class		
Wood working		FFP1 FFP2 FFP3		
Soft wood: Sanding and cutting	Fine particles, wood dust			
Hard wood (oak, beech, tropical wood): Sanding and cutting	Fine particles, wood dust			
Sanding/brushing off colour	Fine paint particles			
Sanding/brushing off colour (paint containing chrome)	Fine paint particles			
Water-soluble paint containing copper/chrome/arsenic	Fine paint particles			
Construction and related industries	·			
Cement work, plastering, tiling, roofing	Cement/plaster/tile/brick dust			
Masonry: Cutting, drilling, demolition				
Asbestos: Working with small amounts	Fibres			
Roof insulation, glass and mineral fibres	Dust and fibres			
Putty/filler: sanding	Dust			
Welding work				
Stainless steel and aluminium welding	Metal and aluminium oxide smoke			
Hard soldering	Smoke			
Metalworking				
Metal: Drilling, grinding, milling, angle grinding	Metal dust			
High alloy steel/stainless steel: Drilling, grinding, milling, angle grinding	Metal dust			
Disposal/Cleaning work				
Waste sorting and disposal	Dust, fungi			
Disposal of medical waste	Bacteria, spores			
Sweeping floors	Dust (not toxic)			
Radioactive dust	Dust			
Agriculture				
Animal diseases/Handling sick animals	Bacteria, viruses			
Handling mould spores	Spores			
Handling hay, cereal, flour	Dust			
Medicine/Care/Health				
Allergies, pollen, house dust, pet hair	Dust, particles, spores			
Bacteria, viruses, infections, Legionella	Bacteria, viruses			



## Period of use:

Single use face masks are primarily suited for use in one shift – in other words a service life of eight hours. However, for special activities with toxic hazardous substances the masks can only be used once. This means that each time the mask is taken off, a new one must be used (for example, when working with carcinogenic substances). For sanitary reasons, single-use face masks should only be worn for one day by one person. Only masks with the "R" symbol can be hygienically cleaned with the special uvex cleaning spray, meaning they can be used for a second shift.

When you use a mask, it gradually absorbs more and more particles, so the filter material becomes clogged over time. This continuously increases the breathing resistance of the mask. When there are high particle concentrations in the environment it may therefore also be necessary to use several masks in a day, as the masks quickly become clogged and the breathing resistance deteriorates.



## Filter types:

#### uvex particle masks:

All uvex particle-filtering half masks are certified in accordance with the standard EN 149:2001 + A1:2009.

#### FFP1

Protects against non-toxic fine dust up to 4 times the limit value. All FFP1 masks are identified by the blue lettering on the valve and the imprint on the mask.



#### FFP2

Protects against low toxic fine dust up to 10 times the limit value. All FFP2 masks are identified by the orange lettering on the valve and the imprint on the mask.



#### FFP3

Protects against toxic fine dust up to 30 times the limit value. All FFP3 masks are identified by the black lettering on the valve and the imprint on the mask.



## Classification of gas filters:

The gas filters and their fields of application are identified by different colours and letters.

#### Α

Protects against gas and smoke, e.g. solvents such as turpentine, nitrocellulose thinner, petrol, tetrachloroethylene, toluene, xylene, with a boiling point > 65°C Colour code: brown

#### В

Protects against inorganic gas and smoke, such as chlorine, bromine, hydrogen sulphide, etc.
Colour code: grey

#### Ε

Protects against acid gas and smoke, such as sulphur dioxide, hydrogen chloride, etc.
Colour code: yellow

#### K

Protects against ammonia and organic amines such as dimethylamine, etc.
Colour code: green

#### AX

Protects against low-boiling organic compounds with a boiling point  $\leq 5$  °C.

Colour code: brown

#### Hg

Protects against mercury Colour code: red





## Mask range:

It is essential for the safety of the wearer to choose the right respiratory devices, a great deal of care should be taken in the decision. In order to choose the right filtering face masks, make sure you take note of each of the following points:

- The type, composition and concentration of the hazardous substances must be determined or already known (take note of the CAS number)
- 2. What occupational exposure limits apply to the hazardous substances present?
- 3. The working conditions at the workplace must be determined or already known.
- There must be sufficient oxygen in the environment (please take note of the applicable legal requirements, in Germany this is at least 17 % vol.).
- 5. In what state do the hazardous substances manifest: as gas, particles or a mixture?
- 6. What warning properties do the hazardous substances have (smell, taste, etc.)?
- 7. What additional personal protective equipment is necessary (e.g., safety spectacles, chemical protection suits, gloves)?

After consideration of these seven points, the necessary nominal protection factor (NPF) must be decided using the following formula:

Protection factor = harmful substance concentration/OEL (OEL = An occupational limit is an upper limit on the acceptable concentration of a hazardous substance in workplace air for a particular material or class of materials.)

After determining the NPF, the appropriate mask can be selected:

- FFP1 masks for up to a maximum 4 times the protection factor
- FFP2 masks for up to a maximum 10 times the protection factor
- FFP3 masks for up to a maximum 30 times the protection factor

These values apply for Germany and may vary depending on the national regulations.

uvex preformed and folding masks are particularly well-suited for use in combination with uvex safety spectacles.

You can find more information about respiratory protection on **ures.uvex.de/en** 





Substance name	CAS no.	Limit value ml/m³	Limit value mg/m³	State	Filter type	uvex Face mask
Acetaldehyde	75-07-0	50	91	liquid	AX	
Acetic acid	64-19-7	10	25	liquid	E (A, B)	on request
Acetone	67-64-1	500	1200	liquid	AX	
Acetonitrile	75-05-8	20	34	liquid	Α	on request
Acid gas				gas	E	on request
Acrolein	107-02-8	0,09	0,2	liquid	AX	
Acrylamide	79-06-1		0,07	solid	A/P3	on request
Acrylic acid	79-10-7	10	30	liquid	Α	on request
Acrylonitrile	107-13-1		0,26	liquid	Α	on request
Aluminium	7429-90-5		1,25	solid	P1	all P1 masks
Aluminium chloride				solid	P2	all P2 masks
Aluminium oxide (no fibres)	1302-74-5		1,25	solid	P1	all P1 masks
Aluminium oxide smoke (welding)				solid	P2/P3	all P2/P3 masks
Amine (C7-C9 aliph.)				liquid	A,K	on request
2-Aminobutane, see Butylamine				liquid	AX	· ·
Ammonia	7664-41-7	20	14	gas/liquid	K	on request
Ammonium chloride				solid	P2	all P2 masks
Ammonium hydroxide, see ammonia					K	on request
Aniline	62-53-3	2	7,7	liquid	Α	on request
Antimony	7440-36-0		,	solid	P3	all P3 masks
Arsenic trioxide (arsenic)				solid	P3	all P3 masks
Arsenous acid			0,1	solid	P3	all P3 masks
Arsenous acid salts			0,1	solid	P3	all P3 masks
Arsine	7784-42-1		,	gas	B (P3)	
Artificial mineral fibres				solid	P3	all P3 masks
Asbestos up to 100,000 F/m <sup>3</sup>	1332-21-4			solid	P2/3	all P2/P3 masks
Asbestos up to 100,000 up to 300,000	) F/m <sup>3</sup>			solid	P3 VM	all P3 VM masks
Ash				solid	P2	all P2 masks
Atrazine	1912-24-9		1	solid	P2	all P2 masks
Bacteria risk group 2					P2	all P2 masks
Bacteria risk group 3					P3	all P3 masks
Barium compound, sol.			0,5	solid	P2	all P2 masks
Benzene	71-43-2	0.06	0,2	liquid	A	on request
Benzoic acid		-,	-,-	solid	P2	all P2 masks
Benzo(a)pyrene	50-32-8		70	solid	P3	all P3 masks
Benzyl chloride, see a-chlorotoluene					B, A (P3)	on request
Beryllium	7440-41-7		0,005	solid	P3	all P3 masks
Biological agents risk group 2			-,	solid	P2	all P2 masks
	92-52-4			solid	AP3	on request



Substance name	CAS no.	Limit value ml/m³	Limit value mg/m³	State	Filter type	uvex Face masks
Bitumen, smoke/aerosols	8052-42-4			solid/gas	AP3	on request
Boric acid	10043-35-3		0,5	solid	P2	all P2 masks
Brass				solid	P2/P3	all P2/P3 masks
Bromine	7726-95-6		0,7	liquid	В	on request
1,3-Butadiene	106-99-0	0,2	0,5	gas	AX	
Butane	106-97-8	1000	2400	gas	AX	
Butanol		100	310	liquid	Α	on request
Butanone	78-93-3	200	600	liquid	Α	on request
2-Butoxyethanol	111-76-2	10	49	liquid	Α	on request
2-Butoxyethyl acetate	112-07-2	20	130	liquid	Α	on request
Butyl acetate		62	300	liquid	Α	on request
Butylamine	141-32-2	2	6,1	liquid	Α	on request
Cadmium and compounds	744-43-9		0,03	solid	P3	all P3 masks
Calcium carbonate			,	solid	P1	all P1 masks
Calcium hydroxide	1305-62-0		1	solid	P2	all P2 masks
Calcium oxide	1305-78-8		1	solid	P2	all P2 masks
Calcium sulphate	7778-18-9		6	solid	P2	all P2 masks
Carbon dioxide	124-38-9	5000	9100	gas	UU	
Carbon disulphide				<b>J</b>	В	on request
Carbon disulphide	75-15-0	10	30	liquid	В	on request
Carbon fibres				solid	P2	all P2 masks
Carbon monoxide	630-08-0	30	35	gas	CO	
Caustic alkali				solid/liquid	P2	all P2 masks
Cement				solid	P2	all P2 masksn
Chlorine	7782-50-5	0.5	1.5	gas	В	on request
Chloroacetic acid	79-11-8	1	4	liquid	E	on request
Chlorobenzene	108-90-7	10	47	liquid	Α	on request
2-Chlorobuta-1,3-diene	126-99-8			liquid	AX	
1-chloro-2,3-epoxypropane	106-89-8	0,6	2,3	liquid	Α	on request
Chloroform, see trichloromethane		, , ,	,-		AX	
3-Chloropropene	107-05-1			liquid	AX	
a-Chlorotoluene	100-44-7			liquid	B. A (P3)	on request
Chromium			0.05	solid	P3	all P3 masks
Cobalt			0.1	solid	P3	all P3 masks
Compound in respirable droplets			0,05		P3	all P3 masks
Concrete (spraying)			5,55		P2	all P2 masks
Copper	7440-50-8		0,01	solid	P2	all P2 masks
Corundum (aluminium oxide)			1.25	solid	P1	all P1 masks
Cotton dust			1.5	solid	P2	all P2 masks



Substance name	CAS no.	Limit value ml/m³	Limit value mg/m³	State	Filter type	uvex Face masks
Coxiella burnetii				solid	P3	all P3 masks
Cresol	1319-77-3			liquid	Α	on request
Cristobalite, see quartz				solid	P3	all P3 masks
Cumene	98-82-8	20	100	liquid	Α	on request
Cutting fluids				liquid	P2	all P2 masks
Cyanamide	420-04-2	0,2	0,35	solid	BP2	on request
Cyanide			2	solid	P2	all P2 masks
Cyclohexane	110-82-7	200	700	liquid	Α	on request
Cyclohexanol	108-93-0			liquid	Α	on request
Cyclohexanone	108-94-1	20	80	liquid	Α	on request
Cyclohexylamine	108-91-8	2	8,2	liquid	A,K	
Cytostatics				solid	P3	all P3 masks
2,4-D	94-75-7		2	solid	P2/3	all P2/P3 masks
Decomposition products from plastics				solid/gas	ABEP3	on request
Demeton	8065-48-3	0,01	0,1	liquid	AP2	
Diacetone alcohol	123-42-2	20	96	liquid	Α	on request
Diazinon	333-41-5		0,1	liquid	P3	all P3 masks
Dibenzodioxin			·		P3	all P3 masks
1,2 Dichlorobenzene	95-50-1	10	61	liquid	Α	on request
1,1-Dichloroethene	75-35-4	2	8	liquid	AX	•
1,2-Dichloroethene	540-59-0	200	800	liquid	AX	
Dichloromethane	75-09-2	75	260	liquid	AX	
Dichlorvos	62-73-7	0,11	1	liquid	AP2	on request
Dichromate					P3	all P3 masks
Diesel engine emissions			0,3	solid	P3	all P3 masks
Diesel fuel				liquid	Α	on request
Diethyl ether	60-29-7	400	1200	liquid	AX	
Diethylamine	109-89-7	5	15	liquid	AX, K	
Diisopropyl ether	108-20-3	200	850	liquid	Α	on request
Dimethoxymethane	109-87-5	1000	3200	liquid	AX	
Dimethylamine	124-40-3	2	3,7	gas	K	on request
3,3-Dimethylbenzidine	119-93-7	0.003	0,03	solid	(A) P3	on request
Dimethylformamide	68-12-2	5	15	liquid	A	on request
Dimethylnitrosamine	62-75-9		0,001	liquid	A (B) (P3)	on request
Dimethyl sulphate	77-78-1	0,02	0,1	liquid	A (P3)	on request
1.4-Dioxane	123-91-1	20	73	liquid	Α	on request
Dipropylene glycol monomethyl ether	34590-94-8	50	310	liquid	A	on request
Disulfiram	97-77-8		2	solid	P2	all P2 masks
	10025-67-9		-	liquid	В	



Epoxy resin	Substance name	CAS no.	Limit value ml/m³	Limit value mg/m³	State	Filter type	uvex Face masks
2,3-Epoxy-1-propanol 556-52-5   liquid A on request Epoxy resin   liquid A on request Epoxy resin   liquid A on request Ethanol (Cellosolve) 64-17-5 500 960 liquid A on request 2-Ethoxyethanol (Cellosolve) 110-80-5 2 7,6 liquid A on request 2-Ethoxyethyl acetate 111-15-9 2 10,8 liquid A on request Ethyl acetate 141-78-6 400 1500 liquid A on request Ethyl acetate 141-78-6 400 1500 liquid A on request Ethyl acetate 140-88-5 5 21 liquid A on request Ethylacrylate 140-88-5 5 21 liquid A on request Ethylamine 75-04-7 5 9,4 gas K on request Ethylenzene 100-41-4 20 88 liquid A on request Ethylenzene 100-41-4 20 88 liquid A on request Ethylenzene 100-41-4 100 26 liquid AP2 on request Ethylenzene 109-94-4 100 310 liquid AX P2 on request Ethylenzene 109-94-4 100 310 liquid AX P2 all P2 masks Fibre glass   solid P2 all P2 masks Fibre glass   solid P2 all P2 masks Fluoride   1 solid P2 all P1/P2 masks Fluoride   1 solid P2 all P1/P2 masks Fluorine 7782-41-4 1 1,6 gas B on request Formalidelyde, formalin 50-00-0 0,3 0,37 gas Spezial Formalide   Formalide   Solid P2 all P2 masks Flueride   1 solid	Enzyme				solid	P3	all P3 masks
Epoxy resin   Equid	Epichlorohydrin, see chloroexpropane	106-89-8			liquid	Α	on request
Ethanol (Cellosolve) 110-80-5 500 960 liquid A on request 2-Ethoxyethanol (Cellosolve) 110-80-5 2 7,6 liquid A on request 2-Ethoxyethyl acetate 111-15-9 2 10,8 liquid A on request Ethyl acetate 111-15-9 2 10,8 liquid A on request Ethyl acetate 141-78-6 400 1500 liquid A on request Ethyl acetate 141-78-6 400 1500 liquid A on request Ethyl acetate 141-78-6 5 21 liquid A on request Ethylamine 75-04-7 5 9,4 gas K on request Ethylamine 75-04-7 10 26 liquid AP on request Ethylamine 100-41-4 20 88 liquid AP on request Ethylengelycol 107-21-1 10 26 liquid AP2 on request Ethylengelycol 107-21-1 10 26 liquid AP2 on request Ethylengelycol 107-21-1 10 310 liquid AX Fibre dust, anorganic P2 all P2 masks Fibre dust, anorganic Solid P2 all P2 masks Fibre glass Solid P2 all P2 masks Fibre dust, anorganic Solid P2 all P2 masks Solid P2 all P2 masks Fibre dust, anorganic Solid P2 all P2 masks Solid P3 all P2 masks Solid P3 all P3 masks Solid P4 all P4 masks Solid P4 all P4 masks Solid P4 all P	2,3-Epoxy-1-propanol	556-52-5			liquid	Α	on request
2-Ethoxyethyalod (Cellosolve) 110-80-5 2 7,6 liquid A on request 2-Ethoxyethyl acetate 111-15-9 2 10,8 liquid A on request Ethyl acetate 111-15-9 2 10,8 liquid A on request Ethyl acrylate 141-78-6 400 1500 liquid A on request Ethyl acrylate 140-88-5 5 21 liquid A on request Ethylamine 75-04-7 5 9,4 gas K on request Ethylemine 75-04-7 100-41-4 20 88 liquid A on request Ethylene glycol 107-21-1 10 26 liquid AP2 on request Ethylene glycol 107-21-1 10 26 liquid AP2 on request Ethylene glycol 107-21-1 10 26 liquid AP2 on request Ethylene glycol 109-94-4 100 30 liquid AX Fibre dust, anorganic P2 all P2 masks Fibre dust, anorganic P10-94-4 100 30 liquid AX Fibre dust, anorganic P10-94-4 1 1 solid P2 all P1/P2 masks Fibroride 1 solid P2 all P1/P2 masks Fibroride 1 solid P2 all P1/P2 masks Fibroride 1 solid P2 all P2 masks Fibroride 1 solid P2 all P2 masks Fibroride I1 solid P2 all P2 masks Fibroride I1 solid P2 all P2 masks Formaldelyde, formalin 50-00-0 0,3 0,37 gas Spezial Formacid A on request Formic acid 64-18-6 5 9,5 liquid A on request Fungal spores (risk group 2) Solid P2 all P2 masks Gulturaldehyde 111-30-8 0,05 0,2 liquid A on request Graphite 7782 1,325 solid P1 all P1 masks Gypsum, see calcium sulphate 8 solid P2 all P2 masks Halothan 151-67-7 5 41 liquid A on request Heptane 142-82-5 500 2100 liquid A on request Hexane 110-54-3 50 180 liquid A on request Hexan	Epoxy resin				liquid	Α	on request
2-Ethylacetate 111-15-9 2 10,8 liquid A on request Ethyl acetate 141-78-6 400 1500 liquid A on request Ethylacetate 141-78-6 400 1500 liquid A on request Ethylacetate 140-88-5 5 21 liquid A on request Ethylamine 75-04-7 5 9,4 gas K on request Ethylenzene 100-41-4 20 88 liquid A on request Ethylenzene 110-21-1 10 26 liquid AP2 on request Ethylenzene 110-21-1 10 26 liquid AX Fibre glass Fibre dust, anorganic P2 all P2 masks Fibre glass Solid P2 all P2 masks Fibre glass Solid P2 all P2 masks Fibre dust, anorganic Solid P1/P2 all P1/P2 masks Fibre dust, anorganic Solid P2 all P2 masks Solid P3 all P3	Ethanol	64-17-5	500	960	liquid	Α	on request
Ethyl acetate	2-Ethoxyethanol (Cellosolve)	110-80-5	2	7,6	liquid	Α	on request
Ethyl acrylate	2-Ethoxyethyl acetate	111-15-9	2	10,8	liquid	Α	on request
Ethylamine         75-04-7         5         9,4         gas         K         on request           Ethylbenzene         100-41-4         20         88         liquid         A         on request           Ethyl formate         107-21-1         10         26         liquid         AX           Fibre dust, anorganic         P2         all P2 masks           Fibre dust, anorganic         Solid         P2         all P2 masks           Flour dust         Solid         P2         all P2 masks           Flour dust         Solid         P2         all P2 masks           Flour dust         1         Solid         P2         all P2 masks           Flour dust         1         1         Solid         P2         all P1 masks           Flour dust         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1 <td>Ethyl acetate</td> <td>141-78-6</td> <td>400</td> <td>1500</td> <td>liquid</td> <td>Α</td> <td>on request</td>	Ethyl acetate	141-78-6	400	1500	liquid	Α	on request
Ethylbenzene         100-41-4         20         88         liquid         A         on request           Ethylene glycol         107-21-1         10         26         liquid         AP2         on request           Ethyl formate         109-94-4         100         310         liquid         AX           Fibre dust, anorganic         P2         all P2 masks         all P2 masks           Fibor glass         solid         P2         all P1/P2 masks           Fluoride         1         solid         P2         all P2 masks           Fluoride         7782-41-4         1         1,6         gas         B         on request           Formalcehyde, formalin         50-00-0         0,3         0,37         gas         Spezial           Formachelyde, formalin         50-00-0         0,3         0,37         gas         Spezial           Formachelyde, formalin         50-00-0         0,3         0,37         gas         Spezial           Formic acid         64-18-6         5         9,5         liquid         A         on request           Fuel (petrol)         Inguid         A         on request         pull pe masks         gall pe masks         gall pe masks         gall pe	Ethyl acrylate	140-88-5	5	21	liquid	Α	on request
Ethylene glycol	Ethylamine	75-04-7	5	9,4	gas	K	on request
Ethyl formate	Ethylbenzene	100-41-4	20	88	liquid	Α	on request
Fibre dust, anorganic         P2         all P2 masks           Fibre glass         solid         P2         all P2 masks           Flour dust         solid         P1/P2         all P2 masks           Fluoride         1 solid         P2         all P2 masks           Fluorine         7782-41-4         1         1,6         gas         B         on request           Formaldehyde, formalin         50-00-0         0,3         0,37         gas         Spezial           Formide         liquid         A         on request           Formide acid         64-18-6         5         9,5         liquid         A         on request           Fuel (petrol)         solid         P2         all P2 masks           Fluorial spores (risk group 2)         solid         P2         all P2 masks           Glutaraldehyde         111-30-8         0,05         0,2         liquid         A         on request           Graphite         7782         1,325         solid         P1         all P2 masks           Gypsum, see calcium sulphate         1         1,325         solid         P1         all P2 masks           Halothan         151-67-7         5         41         liquid <td>Ethylene glycol</td> <td>107-21-1</td> <td>10</td> <td>26</td> <td>liquid</td> <td>AP2</td> <td>on request</td>	Ethylene glycol	107-21-1	10	26	liquid	AP2	on request
Fibre glass	Ethyl formate	109-94-4	100	310	liquid	AX	
Flour dust	Fibre dust, anorganic					P2	all P2 masks
Fluoride         1         solid         P2         all P2 masks           Fluorine         7782-41-4         1         1,6         gas         B         on request           Formaldehyde, formalin         50-00-0         0,3         0,37         gas         Spezial           Formaide         Ilquid         A         on request           Formic acid         64-18-6         5         9,5         liquid         A         on request           Fuel (petrol)         Solid         P2         all P2 masks         Glutaraldehyde         P2         all P2 masks         Glutaraldehyde         P2         all P2 masks         Glutaraldehyde         P1         all P1 masks         Glutaraldehyde         P2         all P2 masks         Glutaraldehyde         P2         all P2 masks         Glutaraldehyde         P2         all P2 masks         Glutaraldehyde         Solid         P2         all P2 masks         Gypsum, see calcium sulphate         Solid         P2         all P2 masks         Gypsum, see calcium sulphate         Solid         P2         all P2 masks         Gypsum, see calcium sulphate         B         on request         A         Halothan         AX         Heptane         H42-82-5         500         2100         liquid         AX <t< td=""><td>Fibre glass</td><td></td><td></td><td></td><td>solid</td><td>P2</td><td>all P2 masks</td></t<>	Fibre glass				solid	P2	all P2 masks
Fluorine	Flour dust				solid	P1/P2	all P1/P2 masks
Formaldehyde, formalin   50-00-0   0,3   0,37   gas   Spezial   Formamide   Formic acid   64-18-6   5   9,5   liquid   E, B   Fuel (petrol)   Solid   P2   all P2 masks   Glutaraldehyde   111-30-8   0,05   0,2   liquid   AP2   on request   Fungal spores (risk group 2)   Solid   P2   all P2 masks   Glutaraldehyde   111-30-8   0,05   0,2   liquid   AP2   on request   AP3   on request   AP3   O,5   Solid   AP3   on request   AP3   O,5   Solid   AP3   On request   AP4	Fluoride			1	solid	P2	all P2 masks
Formamide   Ilquid   A   on request   Formic acid   64-18-6   5   9,5   Ilquid   E, B   Fuel (petrol)   Solid   P2   all P2 masks   Fungal spores (risk group 2)   Solid   P2   all P2 masks   Glutaraldehyde   111-30-8   0,05   0,2   Ilquid   AP2   on request   Graphite   7782   1,325   solid   P1   all P1 masks   Gypsum, see calcium sulphate   Solid   P2   all P2 masks   Halogen   B   on request   Halothan   151-67-7   5   41   Ilquid   AX   Heptane   142-82-5   500   2100   Ilquid   A   on request   Hexachlorocyclohexane   110-54-3   50   180   Ilquid   A   on request   Hexane isomers   500   1800   Ilquid   AX   House dust (mites)   Hydrocarbons (PAK)   Hydrocarbons (PAK)   Hydrochloric acid, see hydrogen chloride   Hydrogen bromide   10035-10-6   2   6,7   gas/liquid   E   on request   Hydrogen chloride   7647-01-0   2   3   gas   E   on request	Fluorine	7782-41-4	1	1,6	gas	В	on request
Formic acid	Formaldehyde, formalin	50-00-0	0,3	0,37	gas	Spezial	
Fuel (petrol)         liquid         A         on request           Fungal spores (risk group 2)         solid         P2         all P2 masks           Glutaraldehyde         111-30-8         0,05         0,2         liquid         AP2         on request           Graphite         7782         1,325         solid         P1         all P1 masks           Gypsum, see calcium sulphate         solid         P2         all P2 masks           Halogen         B         on request           Halothan         151-67-7         5         41         liquid         AX           Heptane         142-82-5         500         2100         liquid         A         on request           Hexachlorocyclohexane         319-84-6         0,5         solid         AP2         on request           Hexane         110-54-3         50         180         liquid         A         on request           Hexane isomers         500         1800         liquid         AX         AX           House dust (mites)         solid         P         all P1 masks           Hydrozarbons (PAK)         liquid/solid         A/P3         on request           Hydrocarbons (PAK)         gas/liquid <td< td=""><td>Formamide</td><td></td><td></td><td></td><td>liquid</td><td>A</td><td>on request</td></td<>	Formamide				liquid	A	on request
Solid   P2   all P2 masks	Formic acid	64-18-6	5	9,5	liquid	E, B	
Glutaraldehyde	Fuel (petrol)				liquid	Α	on request
Graphite         7782         1,325         solid         P1         all P1 masks           Gypsum, see calcium sulphate         solid         P2         all P2 masks           Halogen         B         on request           Halothan         151-67-7         5         41         liquid         AX           Heptane         142-82-5         500         2100         liquid         A         on request           Hexachlorocyclohexane         319-84-6         0,5         solid         AP2         on request           Hexane         110-54-3         50         180         liquid         A         on request           Hexane isomers         500         1800         liquid         AX         AX           House dust (mites)         solid         P         all P1 masks           Hydrozarbons (PAK)         liquid         K         on request           Hydrocarbons (PAK)         gas/liquid         K         on request           Hydrochloric acid, see hydrogen chloride         gas/liquid         E         on request           Hydrogen bromide         10035-10-6         2         6,7         gas/liquid         E         on request           Hydrogen chloride         7647-01-0 </td <td>Fungal spores (risk group 2)</td> <td></td> <td></td> <td></td> <td>solid</td> <td>P2</td> <td>all P2 masks</td>	Fungal spores (risk group 2)				solid	P2	all P2 masks
Gypsum, see calcium sulphate         solid         P2         all P2 masks           Halogen         B         on request           Halothan         151-67-7         5         41         liquid         AX           Heptane         142-82-5         500         2100         liquid         A         on request           Hexachlorocyclohexane         319-84-6         0,5         solid         AP2         on request           Hexane         110-54-3         50         180         liquid         A         on request           Hexane isomers         500         1800         liquid         AX           House dust (mites)         solid         P         all P1 masks           Hydrazine         302-01-2         0,1         0,13         liquid         K         on request           Hydrocarbons (PAK)         liquid/solid         A/P3         on request           Hydrochloric acid, see hydrogen chloride         gas/liquid         E         on request           Hydrogen bromide         10035-10-6         2         6,7         gas/liquid         E         on request           Hydrogen chloride         7647-01-0         2         3         gas         E         on request <td>Glutaraldehyde</td> <td>111-30-8</td> <td>0,05</td> <td>0,2</td> <td>liquid</td> <td>AP2</td> <td>on request</td>	Glutaraldehyde	111-30-8	0,05	0,2	liquid	AP2	on request
Halogen	Graphite	7782		1,325	solid	P1	all P1 masks
Halothan         151-67-7         5         41         liquid         AX           Heptane         142-82-5         500         2100         liquid         A         on request           Hexachlorocyclohexane         319-84-6         0,5         solid         AP2         on request           Hexane         110-54-3         50         180         liquid         A         on request           Hexane isomers         500         1800         liquid         AX           House dust (mites)         solid         P         all P1 masks           Hydrazine         302-01-2         0,1         0,13         liquid         K         on request           Hydrocarbons (PAK)         liquid/solid         A/P3         on request           Hydrogen bromide         10035-10-6         2         6,7         gas/liquid         E         on request           Hydrogen chloride         7647-01-0         2         3         gas         E         on request	Gypsum, see calcium sulphate				solid	P2	all P2 masks
Heptane	Halogen					В	on request
Hexachlorocyclohexane         319-84-6         0,5         solid         AP2         on request           Hexane         110-54-3         50         180         liquid         A         on request           Hexane isomers         500         1800         liquid         AX           House dust (mites)         solid         P         all P1 masks           Hydrazine         302-01-2         0,1         0,13         liquid         K         on request           Hydrocarbons (PAK)         liquid/solid         A/P3         on request           Hydrochloric acid, see hydrogen chloride         gas/liquid         E         on request           Hydrogen bromide         10035-10-6         2         6,7         gas/liquid         E         on request           Hydrogen chloride         7647-01-0         2         3         gas         E         on request	Halothan	151-67-7	5	41	liquid	AX	
Hexane	Heptane	142-82-5	500	2100	liquid	Α	on request
Hexane	Hexachlorocyclohexane	319-84-6		0,5	solid	AP2	on request
House dust (mites)  Hydrazine  302-01-2  0,1  0,13  liquid  K  on request  Hydrocarbons (PAK)  Hydrochloric acid, see hydrogen chloride  Hydrogen bromide  10035-10-6  2  6,7  gas/liquid  E  on request  Hydrogen chloride  Hydrogen chloride  7647-01-0  2  3  gas  E  on request		110-54-3	50	180	liquid	Α	on request
Hydrazine 302-01-2 0,1 0,13 liquid K on request Hydrocarbons (PAK) liquid/solid A/P3 on request Hydrochloric acid, see hydrogen chloride gas/liquid E on request Hydrogen bromide 10035-10-6 2 6,7 gas/liquid E on request Hydrogen chloride 7647-01-0 2 3 gas E on request	Hexane isomers		500	1800	liquid	AX	•
Hydrocarbons (PAK)  Ilquid/solid  E on request  Hydrogen bromide  10035-10-6  2 6,7 gas/liquid  E on request  Hydrogen chloride  7647-01-0  2 3 gas  E on request	House dust (mites)					Р	all P1 masks
Hydrocarbons (PAK)  Iiquid/solid E on request Hydrogen bromide E on request Hydrogen chloride F on request F on request	Hydrazine	302-01-2	0,1	0,13	liquid	K	on request
Hydrochloric acid, see hydrogen chloride gas/liquid E on request Hydrogen bromide 10035-10-6 2 6,7 gas/liquid E on request Hydrogen chloride 7647-01-0 2 3 gas E on request	Hydrocarbons (PAK)				liquid/solid	A/P3	on request
Hydrogen bromide 10035-10-6 2 6,7 gas/liquid E on request Hydrogen chloride 7647-01-0 2 3 gas E on request		de					
Hydrogen chloride 7647-01-0 2 3 gas E on request	Hydrogen bromide		2	6,7			·
		7647-01-0	2	3		E	
	Hydrogen cyanide	74-90-8	1,9	2,1		В	



Substance name	CAS no.	Limit value ml/m³	Limit value mg/m³	State	Filter type	uvex Face masks
Hydrogen fluoride, hydrofluoric acid	7664-39-3	1	0,83	gas/liquid	E, B	on request
Hydrogen peroxide	7722-84-1	0,5	0,71	liquid	NO, B	on request
Hydrogen sulphide	7783-06-4	5	7,1	gas	В	on request
Insecticides				solid/liquid	AP2/3	on request
Iodine	7553-56-2			solid	BP2	on request
Iron dust			1,25	solid	P2	all P2 mask
Iron oxide			1,25	solid	P2	all P2 maskss
Isoamyl alcohol	123-51-3	20	73	liquid	Α	on request
Isocyanate, see diisocyanate					B (A) P3	on request
Isophorone	78-59-1	2	11	liquid	A (P2)	on request
Isopropanol	67-63-0	200	500	liquid	Α	on request
Lead and compounds	7439-92-1			solid	P3	all P3 masks
Lead chromate	7758-97-6			solid	P3	all P3 masks
Lead smoke				solid	P3	all P3 masks
Low boilers gr. 1/2					AX	
Magnesium oxide	1309-48-4		3	solid	P1	all P1 masks
Magnesium smoke					P2	all P2 masks
Maleic anhydride	108-31-6	0,1	0,41	solid	AP2	on request
Manganese and compounds		-,	0,5	solid	P2	all P2 masks
Marble			-,-	solid	P1	all P1 masks
Mercaptan					В	on request
Mercury	7439-97-6		0,02	liquid	Hg	
Methane			- , -	gas	υŬ	
Methanol	67-56-1	200	270	liquid	AX	
3-Methoxybutyl acetate	4435-53-4			liquid	A	on request
Methoxyethanol Me-Glycol	109-84-4	1	3,2	liquid	A	on request
1-Methoxy-2-propanyl acetate	108-65-6	50	270	liquid	A	on request
Methyl acrylate	96-33-3	5	18	liquid	A	on request
Methyl ethyl ketone (MEK), see butanone		200	600	liquid	A	on request
Methyl isobutyl ketone (MIBK)	108-10-1	20	83	liquid	A	on request
Methylamine	74-89-5	10	13	gas	K	on request
Methylated spirit	1 1 00 0	10	10	liquid	A	on request
Methylcyclohexanol	25639-42-3	6	28	liquid	A	on request
Minium (lead oxide)	20000 12 0			solid/liquid	P2	all P2 masks
Molybdenum and compounds				solid	P2	all P2 masks
Multi-drug resistant tuberculosis (TB)				solid/liquid	P3	all P3 masks
Nanoparticles				solid	P3	all P3 masks
Naphthalene	91-20-3	0.1	0,5	solid (gas)	AP3	on request
Nickel	J. 20 0	٥,٠	0,5	solid (gas)	P2	all P2 masks



Nitric acid   7697-37-2   1   2,6   liquid   B, NO   on request   Nitro compounds (organic)   Iiquid   A   on request   Nitro compounds (organic)   Iiquid   A   on request   Nitro period   Iiquid   A   on request   Nitrogen oxide (see nitrous gases)   No   No   N-Nitrosamine   0,01   solid (gas)   (A) P3   on request   Octane   500   2400   liquid   A   on request   Organic smoke   Iiquid   A   on request   Oxalic acid   144-62-7   1   solid   P2   all P2 masks   Ozone   10028-15-6   gas   NO (AB)   on request   Paint splashes   AP2   on request   Parathion (E605)   56-38-2   0,1   liquid   E, B (P3)   Perchloroethylene, see tetrachloroethylene   Iiquid   A   on request   Peracetic acid   79-21-0   Iiquid   A   on request   Peracetic acid   79-21-0   Iiquid   A   on request   Petroleum   Iiquid   A   on request   Petroleum of stillate   Iiquid   A   on request   Phenol   75-44-5   0,1   0,41   gas   B   Phosphorazine   75-44-5   0,1   0,41   gas   B   Phosphorazine   75-44-5   0,1   0,41   gas   B   Phosphorus pentoxide   779-12-2   0,5   2,8   Iiquid   AP3   on request   Phosphorus pentoxide   779-12-2   0,5   2,8   Iiquid   AP3   on request   Phosphorus pentoxide   779-12-2   0,5   2,8   Iiquid   AP3   on request   Polychlorinated biphenyl   Polychloride (PVC)   9002-86-2   1,25   solid   P2   all P2 masks   Polychlorinated biphenyl   Polychloride (PVC)   9002-86-2   1,25   solid   P2   all P2 masks   Polychlorinated biphenyl   Polychloride (PVC)   9002-86-2   1,25   solid   P3   all P3 masks   Polychlorinated biphenyl   Polychloride (PVC)   9002-86-2   1,25   solid   P3   all P3 masks   Rust   Yamask   Silicio acid   P3   all P3 masks	Substance name	CAS no.	Limit value ml/m³	Limit value mg/m³	State	Filter type	uvex Face masks
Nitro thinner	Nitric acid	7697-37-2	1	2,6	liquid	B, NO	on request
Nitrogen oxide (see nitrous gases)	Nitro compounds (organic)				liquid	Α	on request
N-Nitrosamine	Nitro thinner				liquid	Α	on request
Octane	Nitrogen oxide (see nitrous gases)				gas	NO	
Organic smoke         Ifquid         A         on request           Oxalic acid         144-62-7         1         solid         P2         all P2 masks           Ozone         10028-15-6         gas         NO (A;B)         on request           Parthion (E605)         56-38-2         0,1         liquid         (A) P2/3         on request           Perchloroethylene, see tetrachloroethylene         biquid         E,B (P3)         Feracetic acid         Feracetic acid         P1         all P1 masks           Petrol         solid         P1         all P1 masks         Petroleum         liquid         A         on request           Petroleum         liquid         A         on request         Petroleum aistillate         liquid         A         on request           Petroleum naphtha         liquid         A         on request         Petroleum aight         A         on request           Phenol         108-95-2         2         8         solid (gas)         A (P2)         on request           Phenylhydrazine         100-63-0         solid (gas)         A (P2)         on request           Phosphorated hydrogen, (phosphine)         75-44-5         0,1         0,41         gas         B         on request	N-Nitrosamine			0,01	solid (gas)	(A) P3	on request
Oxalic acid         144-62-7         1         solid         P2         all P2 masks           Ozone         10028-15-6         gas         NO (A;B)         on request           Paint splashes         AP2         on request           Parathion (E605)         56-38-2         0,1         liquid         (A) P2/3         on request           Perchloroethylene, see tetrachloroethylene         Ilquid         E, B (P3)         on request           Petroloroethylene, see tetrachloroethylene         Ilquid         E, B (P3)         on request           Petroleur         Solid         P1         all P1 masks         etroleut         etroleut         all p1 masks         etroleut         etroleut         liquid         A         on request         etroleut         etroleut         liquid         A         on request         etroleut         etroleut         liquid         A         on request         etroleut         etroleum anphtha         liquid         A         on request         etroleut         etroleut         etroleut         all p2         on request         etroleut	Octane		500	2400	liquid	Α	on request
Ozone	Organic smoke				liquid	Α	on request
Paint splashes	Oxalic acid	144-62-7		1	solid	P2	all P2 masks
Parathion (E605)   56-38-2   0,1   liquid   (A) P2/3   on request	Ozone	10028-15-6			gas	NO (A;B)	on request
Perchloroethylene, see tetrachloroethylene	Paint splashes					AP2	on request
Peracetic acid   79-21-0	Parathion (E605)	56-38-2		0,1	liquid	(A) P2/3	on request
Pet hair	Perchloroethylene, see tetrachloroethy	rlene					on request
Petrol	Peracetic acid	79-21-0			liquid	E, B (P3)	
Petroleum distillate	Pet hair				solid	P1	all P1 masks
Petroleum distillate	Petrol				liquid	Α	on request
Petroleum naphtha   Iliquid   A   On request	Petroleum				liquid	Α	on request
Phenol   108-95-2   2   8   solid (gas)   A (P2)   on request	Petroleum distillate				liquid	Α	on request
Phenylhydrazine         100-63-0         solid/liquid         AP3         on request           Phosgene         75-44-5         0,1         0,41         gas         B         on request           Phosgene, carbonyl dichloride         75-44-5         0,1         0,41         gas         B           Phosphorusded hydrogen, (phosphine)         7803-51-2         0,1         0,14         gas         B           Phosphorus pentoxide         1314-56-3         2         solid         P2         all P2 masks           Phosphorus trichloride         7719-12-2         0,5         2,8         liquid         B, E (P2)         on request           Pollen         solid         P2         all P3 masks           Polychlorinated biphenyl         liquid         AP3         on request           Polyvinyl chloride (PVC)         9002-86-2         1,25         solid         P2         all P2 masks           Potassium hydroxide, caustic potash         2-Propanol (Isopropanol)         67-63-0         200         500         liquid         A         A         Propinic acid         A         A         Propinic acid         A (ABE)         on request           Pyridine         110-86-1         liquid         A         on request	Petroleum naphtha				liquid	Α	on request
Phosgene	Phenol	108-95-2	2	8	solid (gas)	A (P2)	on request
Phosgene, carbonyl dichloride         75-44-5         0,1         0,41         gas         B           Phosphorated hydrogen, (phosphine)         7803-51-2         0,1         0,14         gas         B           Phosphorus pentoxide         1314-56-3         2         solid         P2         all P2 masks           Phosphorus trichloride         7719-12-2         0,5         2,8         liquid         B, E (P2)         on request           Pollen         solid         P2         all P3 masks           Polychlorinated biphenyl         liquid         AP3         on request           Polyvinyl chloride (PVC)         9002-86-2         1,25         solid         P2         all P2 masks           Potassium hydroxide, caustic potash         solid/liquid         P2         all P2 masks           2-Propanol (Isopropanol)         67-63-0         200         500         liquid         A           Propionic acid         201-176-3         10         31         liquid         A (ABE)         on request           Pyridine         110-86-1         liquid         A         on request         all P3 masks           Risk group 3         solid         P3         all P3 masks           Rust         solid	Phenylhydrazine	100-63-0			solid/liquid	AP3	on request
Phosphorated hydrogen, (phosphine) 7803-51-2 0,1 0,14 gas B Phosphorus pentoxide 1314-56-3 2 solid P2 all P2 masks Phosphorus trichloride 7719-12-2 0,5 2,8 liquid B, E (P2) on request Pollen Solid P2 all P3 masks Polychlorinated biphenyl Iquid AP3 on request Polyvinyl chloride (PVC) 9002-86-2 1,25 solid P2 all P2 masks Potassium hydroxide, caustic potash 2-Propanol (Isopropanol) 67-63-0 200 500 liquid A Propionic acid 201-176-3 10 31 liquid A (ABE) on request Pyridine 110-86-1 Iquid A on request Quartz Solid P3 all P3 masks Rust Solid P3 all P1 masks Silica gas 0,3 solid P2 all P2 masks Silici acid P2 all P2 masks	Phosgene	75-44-5	0,1	0,41	gas	В	on request
Phosphorus pentoxide 1314-56-3 2 solid P2 all P2 masks Phosphorus trichloride 7719-12-2 0,5 2,8 liquid B, E (P2) on request Pollen solid P2 all P3 masks Polychlorinated biphenyl liquid AP3 on request Polyvinyl chloride (PVC) 9002-86-2 1,25 solid P2 all P2 masks Potassium hydroxide, caustic potash 2-Propanol (Isopropanol) 67-63-0 200 500 liquid P2 all P2 masks Propionic acid 201-176-3 10 31 liquid A (ABE) on request Pyridine 110-86-1 liquid A on request Pyridine 110-86-1 solid P3 all P3 masks Risk group 3 Rust solid P3 all P3 masks Silica gas 0,3 solid P2 all P2 masks Silici acid P2 all P2 masks	Phosgene, carbonyl dichloride	75-44-5	0,1	0,41	gas	В	
Phosphorus trichloride 7719-12-2 0,5 2,8 liquid B, E (P2) on request solid P2 all P3 masks Pollen Bolychlorinated biphenyl Bolychloride (PVC) 9002-86-2 1,25 solid P2 all P2 masks Potassium hydroxide, caustic potash P2 all P2 masks Propanol (Isopropanol) 67-63-0 200 500 liquid P2 all P2 masks Propionic acid 201-176-3 10 31 liquid A (ABE) on request Prussic acid, see hydrogen cyanide Pyridine 110-86-1 liquid A on request Pyridine 110-86-1 liquid A on request Risk group 3 solid P3 all P3 masks Risk group 3 solid P3 all P1 masks Silica gas 0,3 solid P2 all P2 masks Silicic acid P2 all P2 masks Silicic acid P3 all P3 masks Silicic acid P2 all P2 masks	Phosphorated hydrogen, (phosphine)	7803-51-2	0,1	0,14	gas	В	
Pollen solid P2 all P3 masks Polychlorinated biphenyl liquid AP3 on request Polyvinyl chloride (PVC) 9002-86-2 1,25 solid P2 all P2 masks Potassium hydroxide, caustic potash 2-Propanol (Isopropanol) 67-63-0 200 500 liquid P2 all P2 masks 2-Propinic acid 201-176-3 10 31 liquid A (ABE) on request Prussic acid, see hydrogen cyanide Pyridine 110-86-1 liquid A on request Pyridine 110-86-1 liquid A on request Quartz solid P3 all P3 masks Risk group 3 Rust solid P3 all P1 masks Silica gas 0,3 solid P2 all P2 masks Silici acid P2 all P2 masks	Phosphorus pentoxide	1314-56-3		2	solid	P2	all P2 masks
Polychlorinated biphenyl Polychloride (PVC) Polyvinyl chloride (PVC) Potassium hydroxide, caustic potash 2-Propanol (Isopropanol) Propionic acid Propionic acid Pryridine Pyridine Quartz Quartz Quartz Quarts Quart	Phosphorus trichloride	7719-12-2	0,5	2,8	liquid	B, E (P2)	on request
Polyvinyl chloride (PVC) 9002-86-2 1,25 solid P2 all P2 masks Potassium hydroxide, caustic potash 2-Propanol (Isopropanol) 67-63-0 200 500 liquid A Propionic acid 201-176-3 10 31 liquid A (ABE) on request Prussic acid, see hydrogen cyanide Pyridine 110-86-1 liquid A on request Quartz solid P3 all P3 masks Risk group 3 Rust solid P1 all P1 masks Silica gas 0,3 solid P2 all P2 masks Silici acid P2 all P2 masks	Pollen				solid	P2	all P3 masks
Potassium hydroxide, caustic potash         solid/liquid         P2         all P2 masks           2-Propanol (Isopropanol)         67-63-0         200         500         liquid         A           Propionic acid         201-176-3         10         31         liquid         A (ABE)         on request           Prussic acid, see hydrogen cyanide         B         on request         B         on request           Pyridine         110-86-1         liquid         A         on request           Quartz         solid         P3         all P3 masks           Risk group 3         solid         P3         all P1 masks           Rust         solid         P1         all P1 masks           Silica gas         0,3         solid         P2         all P2 masks           Silicic acid         4         solid         P2         all P2 masks	Polychlorinated biphenyl				liquid	AP3	on request
2-Propanol (Isopropanol)       67-63-0       200       500       liquid       A         Propionic acid       201-176-3       10       31       liquid       A (ABE)       on request         Prussic acid, see hydrogen cyanide       B       on request         Pyridine       110-86-1       liquid       A       on request         Quartz       solid       P3       all P3 masks         Risk group 3       solid       P3       all P3 masks         Rust       solid       P1       all P1 masks         Silica gas       0,3       solid       P2       all P2 masks         Silicic acid       4       solid       P2       all P2 masks	Polyvinyl chloride (PVC)	9002-86-2		1,25	solid	P2	all P2 masks
Propionic acid         201-176-3         10         31         liquid         A (ABE)         on request           Prussic acid, see hydrogen cyanide         B         on request           Pyridine         110-86-1         liquid         A         on request           Quartz         solid         P3         all P3 masks           Risk group 3         solid         P3         all P3 masks           Rust         solid         P1         all P1 masks           Silica gas         0,3         solid         P2         all P2 masks           Silicic acid         4         solid         P2         all P2 masks	Potassium hydroxide, caustic potash				solid/liquid	P2	all P2 masks
Prussic acid, see hydrogen cyanide         B         on request           Pyridine         110-86-1         liquid         A         on request           Quartz         solid         P3         all P3 masks           Risk group 3         solid         P3         all P3 masks           Rust         solid         P1         all P1 masks           Silica gas         0,3         solid         P2         all P2 masks           Silicic acid         4         solid         P2         all P2 masks	2-Propanol (Isopropanol)	67-63-0	200	500	liquid	Α	
Pyridine         110-86-1         liquid         A         on request           Quartz         solid         P3         all P3 masks           Risk group 3         solid         P3         all P3 masks           Rust         solid         P1         all P1 masks           Silica gas         0,3         solid         P2         all P2 masks           Silicic acid         4         solid         P2         all P2 masks	Propionic acid	201-176-3	10	31	liquid	A (ABE)	on request
Quartz         solid         P3         all P3 masks           Risk group 3         solid         P3         all P3 masks           Rust         solid         P1         all P1 masks           Silica gas         0,3         solid         P2         all P2 masks           Silicic acid         4         solid         P2         all P2 masks	Prussic acid, see hydrogen cyanide				•	В	on request
Quartz         solid         P3         all P3 masks           Risk group 3         solid         P3         all P3 masks           Rust         solid         P1         all P1 masks           Silica gas         0,3         solid         P2         all P2 masks           Silicic acid         4         solid         P2         all P2 masks	, , , ,	110-86-1			liquid	Α	
Rust         solid         P1         all P1 masks           Silica gas         0,3         solid         P2         all P2 masks           Silicic acid         4         solid         P2         all P2 masks						P3	
Rust         solid         P1         all P1 masks           Silica gas         0,3         solid         P2         all P2 masks           Silicic acid         4         solid         P2         all P2 masks	Risk group 3				solid	P3	all P3 masks
Silicic acid 4 solid P2 all P2 masks					solid	P1	all P1 masks
	Silica gas			0,3	solid	P2	all P2 masks
Silicon carbide 409-21-2 solid P2 all P2 masks	Silicic acid			4	solid	P2	all P2 masks
	Silicon carbide	409-21-2			solid	P2	all P2 masks



Substance name	CAS no.	Limit value ml/m³	Limit value mg/m³	State	Filter type	uvex Face masks
Silver compounds			0,01	solid	P3	all P3 masks
Smoke				solid/gas	P2/(BP3)	on request
Sodium azide	247-852-1		0,2	solid	P2	all P2 masks
Sodium hydroxide, caustic soda	1310-73-2		,	solid/liquid	P2	all P2 masks
Sodium hypochlorite				solid (gas)	P (B)	on request
Solvent mixture				,	Α	on request
Soot				solid	P2	all P2 masks
Stainless steel, smoke, fine dust				solid	P3	all P3 masks
Stibine	7803-52-3			gas	В	
Stone dust (containing guartz)				solid	P2	all P2 masks
Styrene	100-42-5	20	86	liquid	Α	on request
Sulphur dioxide	7446-09-5	1	2,5	gas	E	on request
Sulphuric acid	7664-93-9		0.1	liquid	Р	
Talc			- /	solid	P2	all P2 masks
Tellurium and compounds				solid	P3	all P3 masks
1,1,2,2-Tetrachloro-1,2-difluoroethane (R 112)	76-12-0	200	1700	liquid	Α	on request
1,1,2,2-Tetrachloroethane	79-34-5	1	7	liquid	Α	on request
Tetrachloroethylene	127-18-4	20	138	liquid	A	on request
Tetrachloromethane	56-23-5	0,5	3,2	liquid	Α	on request
Tetrahydrofuran (THF)	109-99-9	50	150	liquid	A	on request
Thiram	137-26-8		1	solid	P2	all P2 masks
Tin compounds, org.					AP3	on request
Tin, tin compounds, inorg.				solid (liquid)	P2 (B)	on request
Titanium dioxide			1,25	solid	P1	all P1 masks
Tobacco dust			-,	solid	P2	all P2 masks
Tobacco smoke				solid (gas)	P3 (ABE)	on request
o-Toluidine	95-53-4		0.5	liquid	Α	on request
Toluene	108-88-3	50	190	liquid	A	on request
1,1,1-Trichloroethane	71-55-6	200	1100	liquid	A	on request
1,1,2-Trichloroethane	79-00-5	10	55	liquid	A	on request
Trichloroethylene (Tri)	79-01-6			liquid	A	on request
Trichloromethane, see chloroform		0,5	2,5	liquid	AX	3 10quoot
Triethylamine	121-44-8	1	4,2	liquid	A (K)	
Trimethylbenzenes (all isomers)	110	20	100	liquid	A	on request
Tri-n-butyltin compounds (TBTO)		0.0018	0,009	liquid	(A) P3	on request
Turpentine	8006-64-2	0,0010	0,000	liquid	A	on request
Jranium compounds	3330 012			solid	P3	all P3 masks
Vanadium pentoxide	1314-62-1			solid	P3	all P3 masks
Vinyl acetate	108-05-4	5	18	liquid	A	on request





Substance name	CAS no.	Limit value ml/m³	Limit value mg/m³	State	Filter type	uvex Face masks
Vinyl chloride	75-01-4	2	5	gas	AX	
Virus risk group 2					P2	all P2 masks
Virus risk group 3					P3	all P3 masks
Welding fumes			1,25	solid	P3	all P3 masks
Wood dust				solid	P2	all P2 masks
Xylene (all isomers)	1330-20-7	100	440	liquid	Α	on request
2,4-Xylidine	95-68-1	5	25	liquid	Α	on request
Zinc oxide smoke	1314-13-2		0,1	solid	P2	all P2 masks

UVEX ARBEITSSCHUTZ GMBH Würzburger Straße 181-189 90766 Fürth Germany

Tel: +49 911 9736-0 Fax: +49 911 9736-0 E-Mail: safety@uvex.de Internet: uvex-safety.com

