

Category	1	2	3	4	5	
Quantity used	Very small; grams or millilitres Examples are lock sprays, certain additives in laboratories	Small; less than 1 kg or litre	Medium; between 1-10 kg or 1-10 litres	Large; over 10 kg or over 10 litres	Very large; over 100 kg Often chemical use is measured in tonnes or cubic metres	<p>[Disclaimer and important note to users!]</p> <p>This general risk matrix has been prepared for helping companies in risk assessment. However, it should be noted that the risk matrix does not represent an absolute truth, nor is it the only way of ranking different hazards and potentials for exposure. Within each company, relative risk may be considered differently. You can use this model to construct your own definition of a risk matrix. If you do this, you should think carefully about at least the following: How do we rank different types of hazards in relation to each other? Are, for example, environmental hazards as important in overall risk as chronic health hazards? You can also use different risk matrices for different types or risk, such as inhalation, skin and eyes, ingestion, chronic health effects, safety effects and effects on environment.</p> <p>MAKE SURE YOU CHECK WHETHER THERE ARE LEGAL REQUIREMENTS OR DEFINITIONS OF RISK LEVELS IN YOUR COUNTRY!</p>
Physical properties affecting exposure	Vapour pressure of liquid is below 2 hPa Non-dust-generation	Vapour pressure of liquid is 2-10 hPa Low dust generation	Vapour pressure of liquid is 10-50 hPa Some dust created	Vapour pressure of liquid is 50-250 hPa Increased dust generation	Gases; Liquids with a vapour pressure over 250 hPa Very high dust generation, aerosols	
Working / process conditions	Fully enclosed system -> No possibility of direct skin contact -> No possibility of exposure by inhalation	Closed system , with small possibility of exposure during some work steps such as decanting or sampling -> Low possibility of direct skin contact -> Low possibility of inhalation	Semi-enclosed system or open system with automatic ventilation and control barriers -> Some possibility of direct skin contact -> Some possibility of inhalation	Open system , passive ventilation and protective barriers -> Medium possibility of direct skin contact -> Medium possibility of inhalation	Open system , no ventilation -> High possibility of direct skin contact -> High possibility of inhalation	
Frequency or duration of use	Rarely, a few times a year Very short use, minutes	Occasional, monthly Short use, less than 1 hour	Frequent, once a day, several times a week Medium use, 1-2 hours at a time	Very frequent, several times a day Use for more than 2 hours at a time	Continuous process	
ACCIDENT potential	Very unlikely	Unlikely	Could happen, has occurred in industry	May happen	Very likely, has happened before at our work place	
Risk phrases	Exposure potential increases /chance of accident increases					
5	Acute hazards: R26, R27, R28, R32 Chronic health hazards: R39, Carc. Cat. 1 and Carc. Cat. 2 + R45 or R49, Mut. Cat. 1, Mut. Cat. 2 + R46, Repr. Cat. 1 + R60, R61 Environmental hazards: R50 and R53, R51 and R53, R50, R54, R55, R56, R57, R58, R59 Safety hazards: R1, R2, R3, R4, R6, R17			Very high risk		Acute hazards: EUH032, Acute Tox. 1 + H330 or H310, Acute Tox. 2 + H330 or H300, STOT SE 1 + H370 Chronic health hazards: Carc. 1A and Carc. 1B + H350 or H350I, Repr. 1A and Repr. 1B + H360, H360F, H360D, H360FD, H360Fd or H360Df, Muta. 1A and Muta. 1B + H340 Environmental hazards: Aquatic Acute 1 + H400, Aquatic Chronic 1 + H410, Aquatic Chronic 2 + H411, Ozone + EUH059 Safety hazards: EUH001, EUH006, Pyr. Liq. 1 + H250, Pyr. Sol. 1 + H250, Unst. Expl. + H200, Expl. 1.1 + H201, Expl. 1.2 + H202
4	Acute hazards: R23, R24, R25, R29, R31, R35, R41, R42, R43, R64 Chronic health hazards: Carc. Cat. 3 + R40, Repr. Cat. 2, + R60, R61, Mut. Cat. 3 + R68, R48 Environmental hazards: R52 and R53, R53 Safety hazards: R5, R9, R12, R14, R15, R16, R18, R19, R30, R44	High risk			Very high risk	Acute hazards: EUH029, EUH031, EUH071, EUH207, Lact. + H362, Acute Tox. 3 + H331, H311 or H301, Asp. Tox. 1 + H304, Resp. Sens. 1 + H334, Skin Sens. 1 + H317, Eye Dam. 1 + H318, Skin Corr. 1A + H314, STOT RE 1 + H372, STOT SE 2 + H371 Chronic health hazards: Carc. 2 + H351, Muta. 2 + H341, Repr. 2 + H361, H361f, H361d or H361fd, EUH070 Environmental hazards: Aquatic Chronic 3 + H412, Aquatic Chronic 4 + H413, Aquatic Acute 2 + H401 (only in GHS) Safety hazards: EUH014, EUH018, EUH019, EUH044, Expl. 1.3 + H203, Expl. 1.5 + H205, Ox. Liq. 1 + H271, Ox. Sol. 1 + H271, Flam. Gas 1 + H220, Flam. Liq. 1 + H224, Flam. Liq. 2 + H225, Flam. Aerosol 1 + H222, Flam. Sol. 1 + H228, Water-react. 1 + H260, Self-heat. 1 + H251, Self-react. A or Org. Perox. A + H240, Self-react. B or Org. Perox. B + H241, Compressed gas, Liquefied gas or Dissolved gas + H280
3	Acute hazards: R20, R21, R22, R34 Chronic health hazards: R33, Repr. Cat. 3 + R62, R63 Environmental hazards: R52 Safety hazards: R7, R8, R11	Medium risk	Increasing risk		High risk	Acute hazards: Skin Corr. 1B or 1C + H314, Acute Tox. 4 + H332, H312 or H302, EUH201, EUH201A, EUH202, EUH203, EUH204, EUH205, EUH206, EUH208, EUH401, H305 (only in GHS) Chronic health hazards: H362, STOT RE 2 + H373 Environmental hazards: Aquatic Acute 3. + H402 (only in GHS) Safety hazards: Expl. 1.4 + H204, Expl. 1.6, Flam. Gas 2 + H221, Flam. Sol. 2 + H228, Flam. Liq. 3 + H226, Flam. Aerosol 2 + H223, Ox. Gas 1 + H270, Self-heat. 2 + H252, Self-react. CD or Org. Perox. CD + H242, Self-react. EF or Org. Perox. EF + H242, Self-react. G, Org. Perox. G, Water-react. 2 + H261, Ox. Liq. 2 or Ox. Sol. 2 + H272, Refrigerated liquefied gas + H281, Met. Corr. 1
2	Acute hazards: R36, R37, R38, R65, R66, R67 Safety hazards: R10	Low risk		High risk		Acute hazards: EUH066, EUH210, STOT SE 3 + H335 or H336, Skin Irrit. 2 + H315, Eye Irrit. 2 + H319, H303 (only in GHS), H313 (only in GHS), H316 (only in GHS), H320 (only in GHS), H333 (only in GHS) Safety hazards: Water-react. 3 + H261, Ox. Liq. 3 or Ox. Sol. 3 + H272, EUH209, EUH209A, H227 (only in GHS)
1	No R-phrases	Low risk	Medium risk			No Hazard statements