Table 1. **Questions (exposure parameters) and answer options of the SK2-RiskManagement software, tool for a preliminary risk assessment of chemicals at work.**

Exposure parameters	**Answer options**	
	0	**1**
1 Physical state of the chemical.	Gas Chemical is present only in gaseous state	Liquid, aerosol or solid
2. Type of the process/how the chemical is used	Enclosed or automatic Chemical is used in underpressure(d) or completely enclosed process. Note that e.g. unloading, packing, loading and waste management are seldom completely enclosed work processes. Evaluate/assess each stage of the work separately, because the same chemical may be used both in enclosed and in manual process	Manual; e.g. painting, spreading, mixing, batching, feeding or packaging of the chemical manually Application, spraying, manual dosage, handling/ transfer of wet or moist products, dusty work or packages are likely to cause exposure. Choose this option/answer also if when gases. dusts or aerosols are emitted to the workspace.
3. a. Vapour pressure of a liquid chemical or b. the dust formation from a solid/powder (In the questions 3 and 4, answer either a or b options, depending on the whether the chemical is a gas or dust.)	a. Low vapour pressure (<1kPa = 10 mbar = 7,5 mmHg) b. No dust is generated a. Most jointing, sealing and cleaning agents and water thinnable paints contain substances with low vapour pressure (<1 kPa). To check the vapour pressure, read the subtitle 9 of the SDS or the International Chemical Safety Card (ICSCs)	a. Moderate or high vapour pressure (>1kPa = 10 mbar = 7,5 mmHg) b. Dust is generated/released from the process. a. Many paints, paint strippers, lacquers, adhesives, thinners, grease and stain removers and printing ink solvents contain organic solvents, which have typically high vapour pressure (>1 kPa).
4. a. Temperature of the process OR b. Spreading of the dust	a. Room temperature or lower b. No significant spreading of dust in the work space a. Compare the current temperature with the boiling point (bp) or the vapour pressure (vp) at the temperature. Evaporation is insignificant in the current temperature If the	a. Higher temperature which increases evaporation b. Dust is spread to the work space a. High processing temperature (such as in welding, flame cutting and aseptic packing or curing of powder paints) can significantly increase emissions (e.g. metal fumes and oxides). If the process temperature is high, enclosing may not sufficiently decrease emissions to the

	chemical's bp. is dozens of centigrade higher than the temperature of the work space or the vp. is less than 500 Pa (=3.75 torr). b. If the work-place surfaces are clean after the working day, the spreading of the dusts is insignificant.	workplaces air. b. Observe the air of the work-space and the surfaces; if dust is seen it will be spread and will be inhaled.
5. Exposure measurements	Highest concentrations measured at the workplace less than 10% of the OEL It is recommendable to carry out exposure measurements at different work sites and stages to monitor at least the worst situations i.e. the highest concentrations. If even the highest concentrations are less than 10% of the OEL, it is unlikely that the work poses any risk to the workers health.	Concentrations have not been measured or they are greater that 10 % of the OEL The analytical data is uncertain, if the most contaminated/dirtiest locations/processes were not measured. When no OEL has been established, expert consultation may be necessary.
6. Local ventilation	Effective local ventilation Local ventilation is effective, when it is sufficient in relation to the emission and placed as near to to the source as possible and when it is regularly cleaned and checked. Spray painting, pools containing easily vaporized substances and mixing of powders require efficient local ventilation.	Local ventilation does not exist or its efficiency has not been checked. Local ventilation is necessary, when emission or evaporation of the chemical or dust formation (e.g. from surfaces or processed materials, from sinks or mixers) is obvious. (For example, air flow from upper part of a mixer to the inlet to the local ventilation should be at least 0.5 m/sec. When a powder is mixed with a liquid it may be necessary to keep the air flow above 1 n/second.)
7. General Ventilation	General ventilation is sufficient - considering the emission and the amount of chemicals used General ventilation is probably sufficient if some of the following is true: • vapour pressure of the chemical is low and process temperature is low, • amount of the chemical is low, or when local ventilation is efficient.	Adequacy of the general ventilation has not been ascertained/verified. For processes with large emissions, usually expert consultation is needed when general ventilation is designed and sized/fitted
8. Breathing masks	Correctly selected breathing masks are used at work Breathing masks are ok, when the filter has been correctly selected to suit for the chemicals used, when filter is regularly changed, and when masks are kept in a clean place near to the work site.	Air masks are not used or are not suitable at that work or are not properly maintained This answer is selected, when observation or interview indicates that breathing masks are not used, when the filter is not selected to suit for the chemicals used, when filter is not regularly changed, or when masks are not properly stored.

9. Direct or indirect skin contact with chemical	No direct or indirect exposure to the chemical at the work No handling of chemicals or contaminated tools/equipment. Working surfaces are kept clean so that exposure and contamination of clothing is minimised	Skin deposition or contact is possible When work tools, surfaces or tables are contaminated, skin exposure is possible. A tight work space increases the likelihood of splashes and skin exposure. There may be hazardous phases also near to a closed process, such as opening, sampling, and loading or the process.
10. Temperature of the work space and the physical load	Normal room temperature and normal humidity Temperature <24°C	Temperature and/or humidity is clearly higher than normal OR the work is physically demanding/hard. High temperature and humidity as well as physically demanding/hard work increase dermal absorption.
11. Personal Protective Equipment (gloves, protective clothing.)	Suitable (tested e.g. by the chemical manufacturer) PPE re used at the workplace Appropriately used, stored (in clean place), regularly changed PPE tested against the particular chemical decrease the dermal exposure. Gloves recommended in the SDS are normally suitable, but in case the chemical is carcinogenic, sensitising or corrosive, the specific permeability data should be obtained and gloves selected accordingly. When the impermeability time of gloves is below 8 hours, the gloves should be taken off after the exposing stage.	PPE are not used at the workplace OR the appropriateness of the PPE has not been assured. Use of inappropriate or dirty gloves causes dermal exposure.
12. Removal of dust and aerosols	Adequate ventilation The process does not generate dust or aerosols or they are efficiently removed/ventilated.	No adequate ventilation Dust or aerosol can be observed in the work place air and/or it has contaminated the surfaces of the work space.