**EMERGE Materials and Processes Risk Assessment (RA) form**

## Instructions for users

1. This document is a risk assessment (RA) form for new chemicals and processes (inks, materials and printing techniques, fabrication, or measurement protocols etc.), which have associated risks, to be introduced at host institution for the execution of the proposed project. The RA must always be done before a new chemical and processes is introduced at host institution. Based on the policies of the host institutions you might not be allowed to use new chemicals (purchased commercially or provided by applicant) or start new processes in the laboratories of host institutions before the RA is done and the procedure is approved.
2. To initiate the RA, applicant need to fill in this form with details of materials and/or processes as much as possible and furnish to the first contact person or TLO of prospective host institution. Safety data sheet (SDS) of materials for both commercial/inhouse developed custom materials should be furnished along with this form. You can refer SDS for information and interpretation of the risks associated with your chemicals/process and understanding the necessary preparations and precautions that need to be taken.
3. In particular any chemical involving carcinogenic materials, nano-particles (powder or solution form), Silicone derivatives, eco-toxic materials; should pass this RA.
4. If TLO Contact requests more information. you will need to make changes to your RA and resubmit for approval.
5. We can assist you if there are any uncertainties in your own first assessment.
6. The user is asked to send the document to TLO/first point of contact at host institution (see contact list at this [Link](https://emerge-infrastructure.eu/apply-for-innovation/proposal-submission-guidelines/)) and to [info@emerge-infrastructure.eu](mailto:info@emerge-infrastructure.eu).

## Call information

|  |  |  |  |
| --- | --- | --- | --- |
| Call No./year |  | Proposal ID number: | If available |
| Title | Title of proposal | | |
|  |  | | |
| Full Name of applicant |  | | |
| Affiliation/ Country |  | | |
| E-mail |  | | |

Information about materials and/or process

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Chemical/Process | | | | | **Chemical(s) CAS:** |
| *Enter CAS no* |
| **Equipment name** |
| *Enter Equip./Tool* |
| Host Institution | | Laboratory: *Chemical, Printing, Characterization etc. where materials will be used or characterized* | | | |
|  | | Specify: *e.g. Screen printing lab* | | | |
| **Risk assessment performed by**:  *Name of person who wrote risk assessment and institution* | | | | | |
| Risk assessment *Categorize in accordance with safety card instructions.* | | | | | |
| **Harmless** | | | *Work where no untoward chemical, physical or biological hazard is involved* | | |
| **Low** risk | | | *Normal laboratory work that does not involve known highly corrosive, acutely toxic or explosive substances, or significant risks* | | |
| **Significant** risk | | | *Work involving the use of organic solvents or chemicals with the following hazards: highly corrosive; acutely toxic; stench; oxidizing; pyrophoric; potentially explosive; violently reactive with water (including strongly acidic solutions), especially use of large quantities. Working with high temperatures or high voltages.* | | |
| **High** risk | | | *High risk work, including work with carcinogens, teratogenic; mutagenic substances.* | | |
|  | | | | | |
| **DESCRIPTION** | Describe chemical, process, or equipment in brief | | | | |
| **GENERAL** | Toxic | | | Strong Acid | Strong Base |
| Carcinogen | | | Mutagenic | Reproduction Toxicity |
| Strong Oxidant | | | Flammable/Explosive | Silicone-free  Certificate/Analysis attached.  Pure solvent/reagent |
| **INTENDED USAGE**  **HAZARDS & RISKS** | *What hazards and risks are associated with the chemicals or procedures?*  *• list of hazard statements and risk phrases?*  *• hazardous if inhaled?*  *• hazardous with skin contact?*  *• hazardous if swallowed?*  *• fire hazard?*  *• special risks such as dangerous reaction with other materials, etc.*  *• toxic, carcinogenic, flammable, oxidising*  *• any other hazards*  *• forms a vapor or powder (dust)?*  *• anticipated skin contact?*  *• can the procedure or material cause sparks?* | | | | |
| **INTENDED USAGE**  **RISK MITIGATION** | *What measures are taken to mitigate known risks?*  *• are safer substitutions made (e.g. use of pellets or granular solids instead of powder or use of small amounts or volumes etc.)?*  *• are exposure levels well below health exposure limits?*  *• use of exhaust/fume hoods?*  *• personal protective equipment (PPE)?* | | | | |
| **UNEXPECTED**  **HAZARDS & RISKS** | *What can go wrong?*  *• elaborate on potential risks from the hazards above, for example fire, burn, spillage or other injury*  *• state main risk for other lab usersstate main risk for other lab users* | | | | |
| **UNEXPECTED**  **FIRST AID**  **FIRE**  **SPILLAGE** | *What measures are taken to mitigate unexpected risks?*  *• are fire and explosion preventions in place?*  *• what other accidents must be prevented?*  *• first aid, measures?*  *• spillage measures?* | | | | |
| **LABELLING & WARNINGS** | *Label and warning requirements?*  *• Name, date, chemical(s) and suitable warnings*  *• Notify people working in the vicinity?* | | | | |
| **STORAGE** | *Storage requirements?*  *• incompatible with certain substances*  *• temperature*  *• exhaust …etc.*  *• specify storage location if possible* | | | | |
| **WASTE** | *How shall any waste be handled?* | | | | |
| **Comments** | *Additional comments or instructions?* | | | | |

Information about applicant, host institution responsible for RA

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| --- | --- | --- |
| Risk assessment performed by-name of applicant:  *Name of applicant:*  *Email id of applicant:* | Signature | Date |
| Risk assessment approved by:  *Name of RA responsible from Host institution:*  *Email id:* | Signature | Date |
| *Name of TLO/first point of contact at Host institution:*  *Email id:* | Signature | Date |