

How to get to the the KLARA system

SWEDISH:

<https://medarbetare.su.se/stod-och-service/verktyg-och-system/sakerhet-och-miljo/klara>

ENGLISH (scroll down to bottom of page for login button)

<https://medarbetare.su.se/en/support-and-service/tools-and-systems/safety-and-environment/klara---system-for-managing-chemicals>

Stockholms universitet Medarbetarwebben

Stöd och service Forskning Utbildning Anställning Vårt SU

Filtrera meny nedan

Verktøy och system

Verktøy och system A-Ö

Ekonomi

Forskning

Generellt

Kommunikation

Personal

Program och licenser

Säkerhet och miljø

IA-systemet

KLARA

KLARA

/ Stöd och service / Verktøy och system / Säkerhet och miljø / KLARA

I KLARA hittar du information om alla de kemikalier som finns på universitetet på ett och samma ställe. Det gör arbetet säkrare och effektivare.

På universitetet finns ett mycket stort utbud av kemikalier. I KLARA får du överblick.

[Logga in i KLARA](#)

Stockholms universitet

Log in

Forgotten your password?

Change password

Activate University account

Privacy Policy

Service Definition

Log in with University account

Username

Password

[Log in](#)

Direct login

For computers with Arbetsplatsjätten (SUA) and in computer halls.

[Direct login](#)

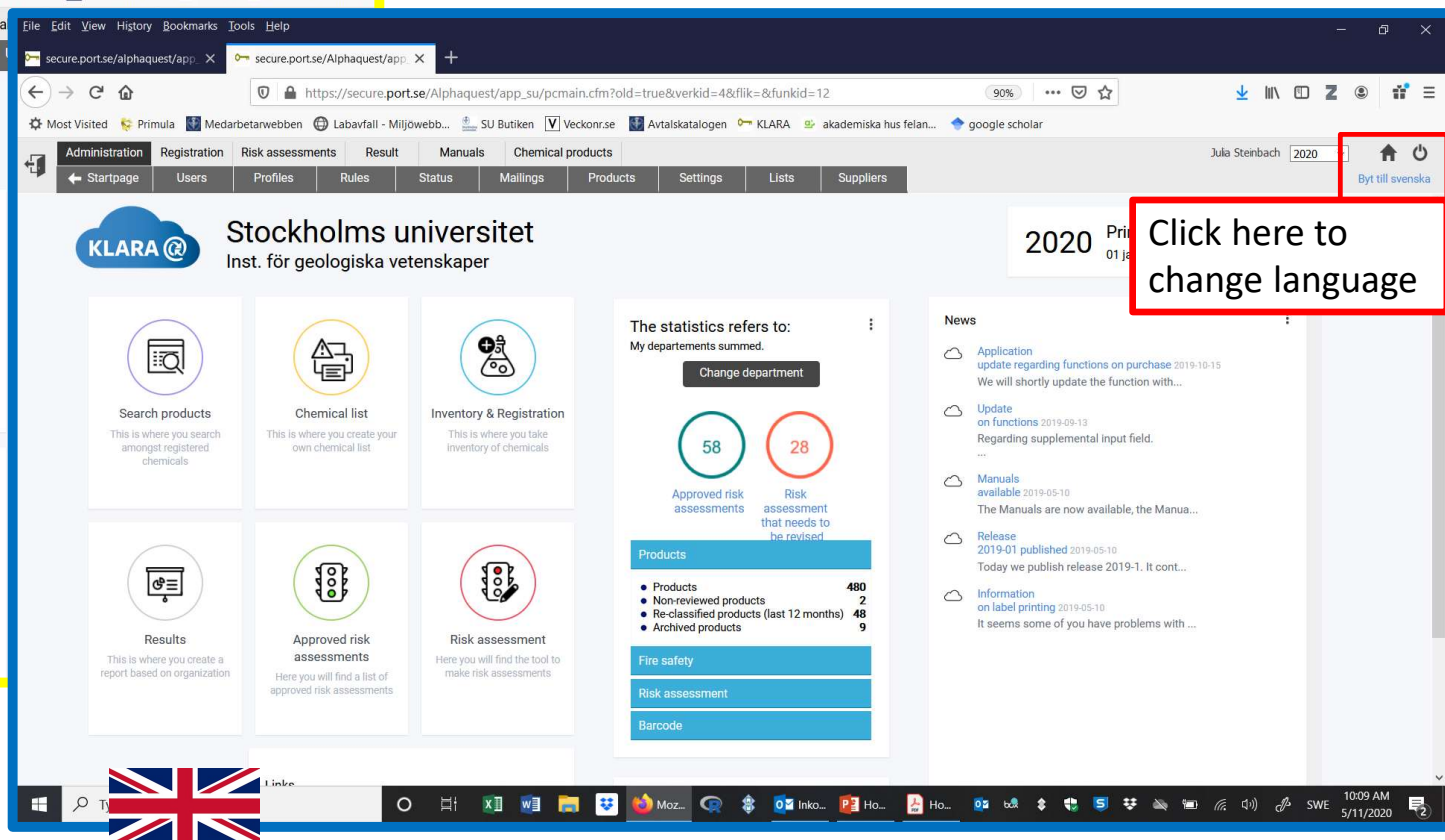
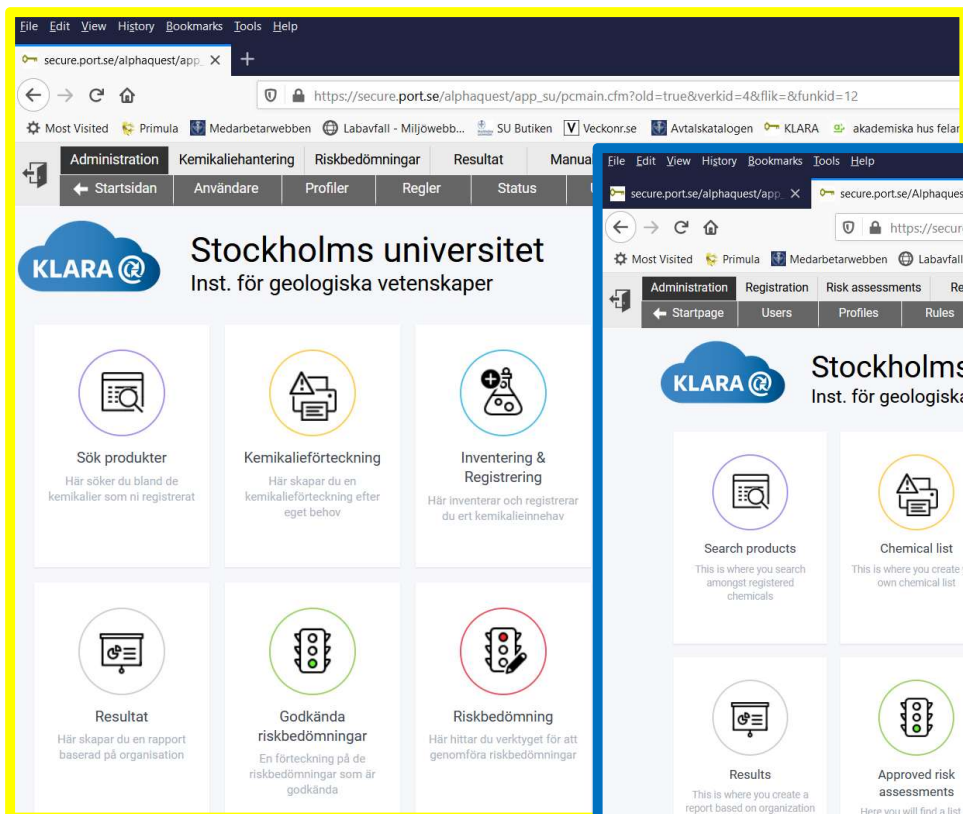
[What's this?](#)

Never leave your computer unlocked while you are logged in.
To completely log out you should close your web browser.

*Login with your university account
(filled in automatically when already logged in to SU wifi)*

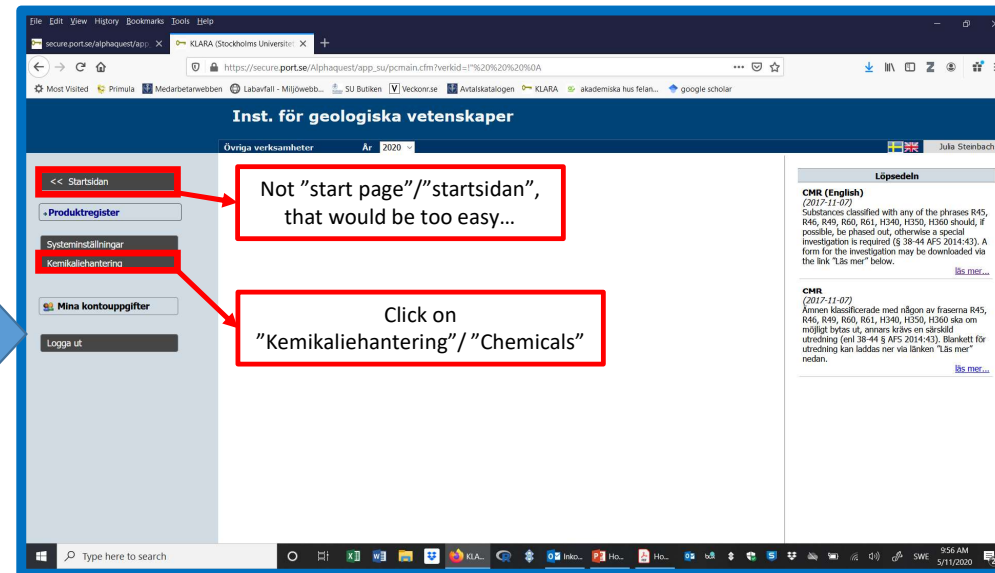
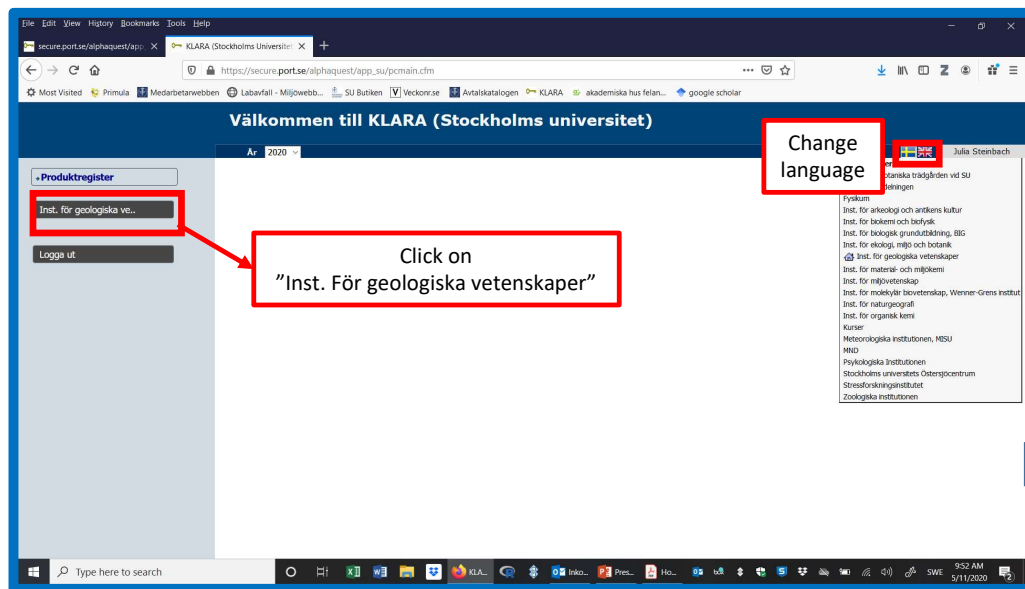
How to get started

*This is how the real start page looks..
but currently you don't get there immediately...*

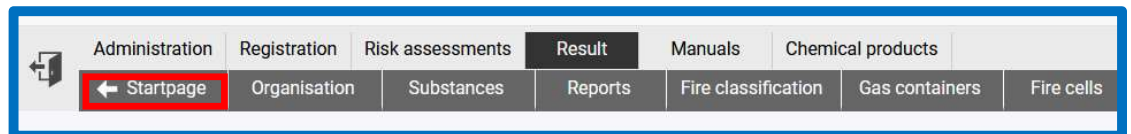


How to get to the start page

This is probably how your start page looks at the moment:



If you get lost later, click on "start page"/Startsidan in the upper taskbar to return to start page



Who can see/make a riskassessment?

- **Researchers/TA/PostDocs:** can create and modify risk assessments and see all IGV-based risk assessments
- **PhD students:** by default can see, but not create/modify risk assessments → supervisors can contact Julia if they want their students to get writing assess as well
- **Master students:** by default can't see risk assessments → supervisors can contact Julia if they want their students to get read access
- **Other SU students** (even those taking courses at IGV, bachelor, examensarbete...): by default can't see risk assessments

Note to supervisors

- it is your responsibility to make the risk assessments relevant to your students' work accessible to them (via KLARA or printed out/pdf)
- Risk assessments are best evaluated by the people working with them, so discuss the risk assessment with the students working with the respective method and ask for their input on what could be missing or is unclear

See all existing/approved risk assessments



Approved risk assessments

Here you will find a list of approved risk assessments



Godkända riskbedömningar

En förteckning på de riskbedömningar som är godkända

→ Click on that icon



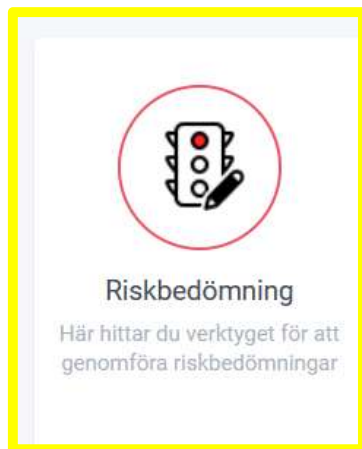
This is new: there is a folder for students in courses, so they can learn/test making riskassessments without messing with IGV's structure, feel free to test that with your course if useful.

If you want to make a "normal" risk assessment, choose the IGV folder.

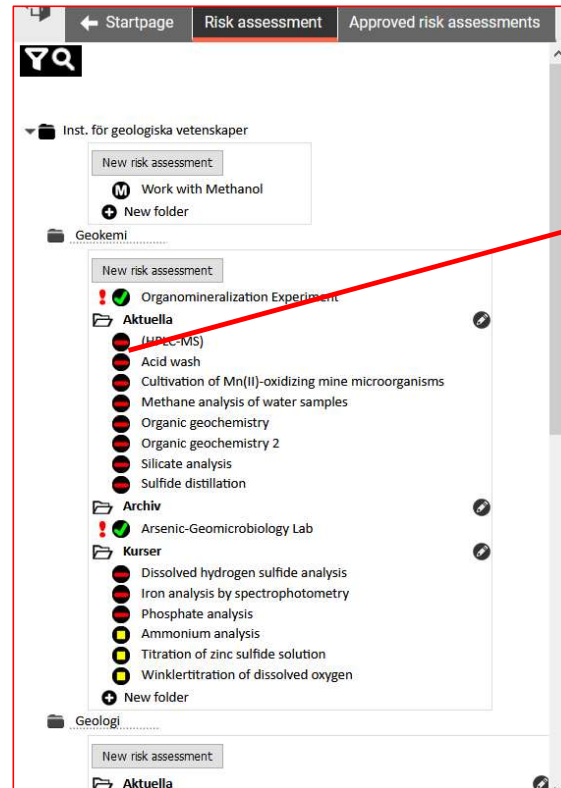
	Skapad	Ändrad	Förnyas	Skapad av
(HPLC-MS)				
Metanalysis av vattenprover				
Organic geochemistry				
Organic geochemistry 2				
Organomineralization Experiment				
Sequential Si leaching				
Silikatanalys				
Syradiskning	2020-05-12	2023-11-09	2024-11-01	Julia Stenbach
Titration of Borax	2021-10-07	2023-11-09	2024-11-01	Wei-Li Hong
ammoniumanalys	2017-02-23	2023-11-09	2024-11-01	Lisa Geovet
fosfatanalys	2017-02-23	2023-11-09	2024-11-01	Lisa Geovet
Järnanalys spektrofotometri	2017-02-23	2023-11-09	2024-11-01	Lisa Geovet
Löst vätesulfidanalys	2017-02-23	2023-11-09	2024-11-01	Lisa Geovet
Nitratanalys	2020-06-03	2023-11-09	2024-11-01	Volker Bruchert
Titration av Zinksulfidlösning	2017-02-23	2023-11-09	2024-11-01	Lisa Geovet
Winkeltitrering av löst syre	2017-02-23	2023-11-09	2024-11-01	Lisa Geovet
Laboratorium för smältning av malt berg	2012-03-08	2023-11-09	2024-11-01	Runa Jacobsson
Mineralseparation med MI	2015-02-05	2023-11-09	2024-11-01	Runa Jacobsson
Upplösning av karbonater med HCl	2016-05-17	2023-11-09	2024-11-01	Malin Söderman
StainClean Betpasta Arbete	2018-11-30	2023-11-09	2024-11-01	Draupnir Einarsson
Laboratoriet för stabila isotoper (SIU)				
Användning av CO gas som Referensgas för IRMS analys	2018-01-30	2023-11-09	2024-11-01	Heike Siegmund
Användning av flytande nitrogen och ethanol som fälla	2016-12-21	2023-11-09	2024-11-01	Heike Siegmund
Fill and transport of liquid nitrogen	2021-06-17	2023-11-09	2024-11-01	Haoyi Yao
Packning av reaktorer till elementar analys	2014-03-14	2023-11-09	2024-11-01	Malin Söderman
Prov förberedelse med V2O5 för analys av svavel stabila isotoper	2011-12-01	2023-11-09	2024-11-01	GEO Institution
Svavel preparation (jonbyta kolonn)	2017-09-29	2023-11-09	2021-07-01	Heike Siegmund
Core Process				

IGVs risk assessments sorted by department

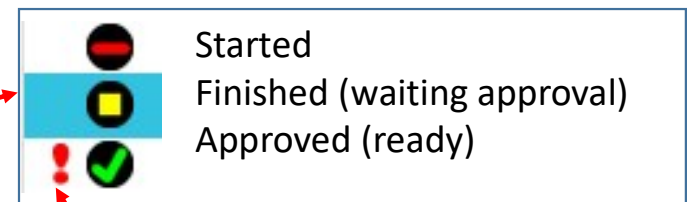
Start a risk assessment



→ Click on that icon



Status of risk assessment



To be updated/checked soon

! The assessment may be outdated:
Date of update is set to **2020-07-01**

See list of current risk assessments
on the left side of the screen

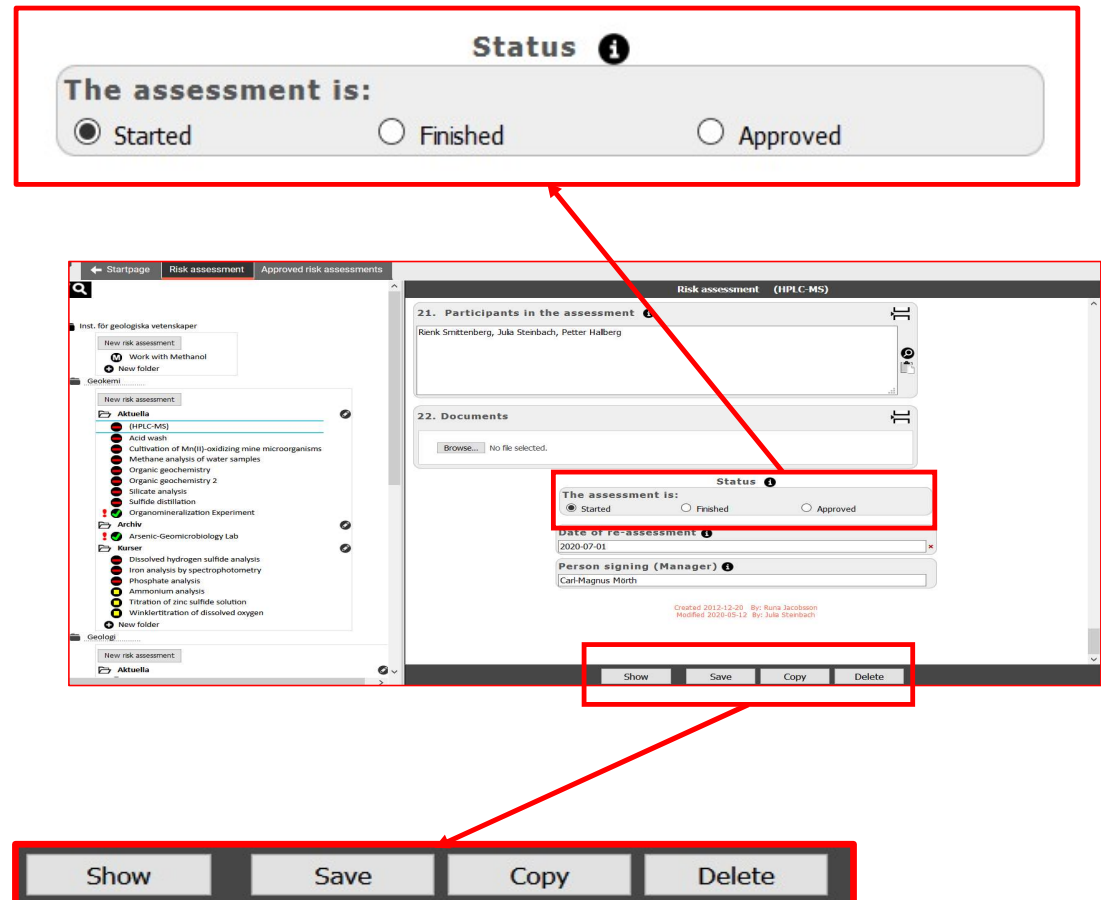
Modify/copy and existing risk assessment

- *Edit an existing assessement*

- *Double-click on the assessment in the list, risk assessment opens at the right -> start editing*
- *Note: If the status is "approved", scroll to the bottom of the page and change the status to "started" first*

- *Copy an existing assessment*

- *Open the existing assessment*
- *Scroll to the bottom and click "copy"*



Create a new risk assessment

- *In your department folder in the list, click on "new risk assessment"*
- *Choose a name and if necessary subfolder*
- *Click "Save assessment"*

The screenshot shows the Geokemi web interface. On the left, under the 'Inst. för geologiska vetenskaper' folder, there is a 'New risk assessment' button highlighted with a red box. An arrow points from this button to the 'New risk assessment for Geokemi' form on the right. The form has the following fields:

- Name:** A text input field.
- Form:** A dropdown menu with 'Risk assessment' selected.
- Folder:** A dropdown menu with 'Kurser', 'Archiv', and 'Aktuella' options.
- Buttons:** 'Save assessment' and 'Save as template' at the bottom.

Fill out the risk assessment form

Write text or click a buttons in each field relevant for your work (empty fields are omitted from pdf version)

Name (Describing name, not just abbreviation) :

 Syraddiskning

 Acid wash

Valid only for department :

1. State the premises in which the activity is taking place ⓘ

Geohuset R322b

2. Description of activity ⓘ

Acid wash for cleaning glassware/sample containers/..

- within an acid-proof fumehood, a plastic box is filled with 3M hydrochloric acid (diluted from 35% acid)
- items to be cleaned are placed in this acid bath for 1h, if required longer (overnight)
- items are removed from the acid bath and placed in a plastic box with MilliQ water for >1h/over night
- items are rinsed with MilliQ water to remove any remaining acid

3. Products ⓘ

Create page breaks
for pdf version

An overall risk category should be determined under this heading, using the table below.

Care should be exercised where the hazard level of an individual compound is unknown. Risk category B or category A should be applied if it is suspected (e.g. in view of similar chemical structure) that the compound may have properties that suggest category A. Where different criteria are used for a certain compound, the one that indicates the highest category shall apply.

Risk category	General description	R-phrases	H-statements
A: Very high risk	- Carcinogenic, mutagenic, toxic for reproduction (high classification)	R45,R46,R49;R60,R61	H350,H350i,H360,H360D,H360Df,H360FH360FD,H360Fd,H370,H372,H340
	- Extremely explosive or extremely flammable substance or gases	R3,R6,R12,R15	EUH001,EUH006,H200,H201,H202,H203H220,H222,H224,H240,H241,H250

Click the ⓘ button to get useful information/help for each field, e.g. how to interpret the inherent risk of chemicals

Add chemicals to risk assessment form

Risk assessment **Acid wash**

Valid only for department : Geokemi

1. State the premises in which the activity is taking place

Geohuset R322b

2. Description of activity

Acid wash for cleaning glassware/sample containers/
- within an acid-proof fumehood, a plastic box is filled
35% acid)
- items to be cleaned are placed in this acid bath for
- items are removed from the acid bath and placed in
>1h/over night

3. Products

Please note that the categorisation of risks should be considered as guidance only.

High risk

Product name	Concentration	Unit	Form	Quantity	Danger	Comments
Saltsyra 35% Level limit value 2 (ppm), 3 (mg/m3)						

Show

Save

Copy

Delete

Products already in use at your department.

This division

Search and add product

Collapse

Order by: Alphabetical

Risk level

Products Geokemi

10% AgNO3 Coated Silica Gel

Aluminium potassium sulfate dodecal

4-Aminobenzoic acid

Ammonia solution 32%

Ammonium acetate

Ammonium bicarbonate

Ammonium carbonate

Ammonium chloride

Ammonium dihydrogen phosphate

Ammonium formate

Ammonium heptamolybdate tetrahyd

Ammonium hydroxide solution (25%

Ammonium hydroxide solution >= 25

Ammonium iron(II) sulfate, hexahydr

di-Ammonium oxalate monohydrate

Ammonium sulfate

Ampicillin

Amyloglucosidase, from Aspergillus r

Salpha-Androst-16-en-3alpha-ol

1,6-Anhydro-beta-D-glucose

Argon

L-Ascorbic acid

L-ascorbic acid -[13C6]

Balsam Canada

Barium chloride dihydrate

Benzoate standrad for IC (1000 mg/L

Click on "this division" to get a list of your department's chemicals to choose from.

Add chemicals from the KLARA system by writing their name in the search field

CMR chemicals

CMR (Carcinogenic Mutagenic Reprotoxic) chemicals should be avoided in use, but sometimes are necessary for a method. However, an investigation has to be performed if the chemical can be replaced by a less harmful one. The documentation for this investigation is now included in KLARA. Extra fields will pop up automatically once a CMR chemicals is added.

3. Products

Please note that the categorisation of risks should be considered as guidance only.

Very high risk

Product name	Quantity	Unit	Concentration	Form	Danger	Comments
1 Sodium tetraborate decahydrate [1302-96-4] Limit (skin value) (ppm): 2 (mg/m ³) Short-term value (ppm): 2 (mg/m ³) P201 + P202 P201 + P202 + P203 + P204 + P205 + P206 + P207 + P208 + P209 + P210 + P211 + P212 + P213 + P214 + P215 + P216 + P217 + P218 + P219 + P220 + P221 + P222 + P223 + P224 + P225 + P226 + P227 + P228 + P229 + P230 + P231 + P232 + P233 + P234 + P235 + P236 + P237 + P238 + P239 + P240 + P241 + P242 + P243 + P244 + P245 + P246 + P247 + P248 + P249 + P250 + P251 + P252 + P253 + P254 + P255 + P256 + P257 + P258 + P259 + P260 + P261 + P262 + P263 + P264 + P265 + P266 + P267 + P268 + P269 + P270 + P271 + P272 + P273 + P274 + P275 + P276 + P277 + P278 + P279 + P280 + P281 + P282 + P283 + P284 + P285 + P286 + P287 + P288 + P289 + P290 + P291 + P292 + P293 + P294 + P295 + P296 + P297 + P298 + P299 + P300 + P301 + P302 + P303 + P304 + P305 + P306 + P307 + P308 + P309 + P310 + P311 + P312 + P313 + P314 + P315 + P316 + P317 + P318 + P319 + P320 + P321 + P322 + P323 + P324 + P325 + P326 + P327 + P328 + P329 + P330 + P331 + P332 + P333 + P334 + P335 + P336 + P337 + P338 + P339 + P340 + P341 + P342 + P343 + P344 + P345 + P346 + P347 + P348 + P349 + P350 + P351 + P352 + P353 + P354 + P355 + P356 + P357 + P358 + P359 + P360 + P361 + P362 + P363 + P364 + P365 + P366 + P367 + P368 + P369 + P370 + P371 + P372 + P373 + P374 + P375 + P376 + P377 + P378 + P379 + P380 + P381 + P382 + P383 + P384 + P385 + P386 + P387 + P388 + P389 + P390 + P391 + P392 + P393 + P394 + P395 + P396 + P397 + P398 + P399 + P400 + P401 + P402 + P403 + P404 + P405 + P406 + P407 + P408 + P409 + P410 + P411 + P412 + P413 + P414 + P415 + P416 + P417 + P418 + P419 + P420 + P421 + P422 + P423 + P424 + P425 + P426 + P427 + P428 + P429 + P430 + P431 + P432 + P433 + P434 + P435 + P436 + P437 + P438 + P439 + P440 + P441 + P442 + P443 + P444 + P445 + P446 + P447 + P448 + P449 + P450 + P451 + P452 + P453 + P454 + P455 + P456 + P457 + P458 + P459 + P460 + P461 + P462 + P463 + P464 + P465 + P466 + P467 + P468 + P469 + P470 + P471 + P472 + P473 + P474 + P475 + P476 + P477 + P478 + P479 + P480 + P481 + P482 + P483 + P484 + P485 + P486 + P487 + P488 + P489 + P490 + P491 + P492 + P493 + P494 + P495 + P496 + P497 + P498 + P499 + P500 + P501 + P502 + P503 + P504 + P505 + P506 + P507 + P508 + P509 + P510 + P511 + P512 + P513 + P514 + P515 + P516 + P517 + P518 + P519 + P520 + P521 + P522 + P523 + P524 + P525 + P526 + P527 + P528 + P529 + P530 + P531 + P532 + P533 + P534 + P535 + P536 + P537 + P538 + P539 + P540 + P541 + P542 + P543 + P544 + P545 + P546 + P547 + P548 + P549 + P550 + P551 + P552 + P553 + P554 + P555 + P556 + P557 + P558 + P559 + P560 + P561 + P562 + P563 + P564 + P565 + P566 + P567 + P568 + P569 + P570 + P571 + P572 + P573 + P574 + P575 + P576 + P577 + P578 + P579 + P580 + P581 + P582 + P583 + P584 + P585 + P586 + P587 + P588 + P589 + P590 + P591 + P592 + P593 + P594 + P595 + P596 + P597 + P598 + P599 + P600 + P601 + P602 + P603 + P604 + P605 + P606 + P607 + P608 + P609 + P610 + P611 + P612 + P613 + P614 + P615 + P616 + P617 + P618 + P619 + P620 + P621 + P622 + P623 + P624 + P625 + P626 + P627 + P628 + P629 + P630 + P631 + P632 + P633 + P634 + P635 + P636 + P637 + P638 + P639 + P640 + P641 + P642 + P643 + P644 + P645 + P646 + P647 + P648 + P649 + P650 + P651 + P652 + P653 + P654 + P655 + P656 + P657 + P658 + P659 + P660 + P661 + P662 + P663 + P664 + P665 + P666 + P667 + P668 + P669 + P670 + P671 + P672 + P673 + P674 + P675 + P676 + P677 + P678 + P679 + P680 + P681 + P682 + P683 + P684 + P685 + P686 + P687 + P688 + P689 + P690 + P691 + P692 + P693 + P694 + P695 + P696 + P697 + P698 + P699 + P700 + P701 + P702 + P703 + P704 + P705 + P706 + P707 + P708 + P709 + P710 + P711 + P712 + P713 + P714 + P715 + P716 + P717 + P718 + P719 + P720 + P721 + P722 + P723 + P724 + P725 + P726 + P727 + P728 + P729 + P730 + P731 + P732 + P733 + P734 + P735 + P736 + P737 + P738 + P739 + P740 + P741 + P742 + P743 + P744 + P745 + P746 + P747 + P748 + P749 + P750 + P751 + P752 + P753 + P754 + P755 + P756 + P757 + P758 + P759 + P760 + P761 + P762 + P763 + P764 + P765 + P766 + P767 + P768 + P769 + P770 + P771 + P772 + P773 + P774 + P775 + P776 + P777 + P778 + P779 + P780 + P781 + P782 + P783 + P784 + P785 + P786 + P787 + P788 + P789 + P790 + P791 + P792 + P793 + P794 + P795 + P796 + P797 + P798 + P799 + P800 + P801 + P802 + P803 + P804 + P805 + P806 + P807 + P808 + P809 + P810 + P811 + P812 + P813 + P814 + P815 + P816 + P817 + P818 + P819 + P820 + P821 + P822 + P823 + P824 + P825 + P826 + P827 + P828 + P829 + P830 + P831 + P832 + P833 + P834 + P835 + P836 + P837 + P838 + P839 + P840 + P841 + P842 + P843 + P844 + P845 + P846 + P847 + P848 + P849 + P850 + P851 + P852 + P853 + P854 + P855 + P856 + P857 + P858 + P859 + P860 + P861 + P862 + P863 + P864 + P865 + P866 + P867 + P868 + P869 + P870 + P871 + P872 + P873 + P874 + P875 + P876 + P877 + P878 + P879 + P880 + P881 + P882 + P883 + P884 + P885 + P886 + P887 + P888 + P889 + P890 + P891 + P892 + P893 + P894 + P895 + P896 + P897 + P898 + P899 + P900 + P901 + P902 + P903 + P904 + P905 + P906 + P907 + P908 + P909 + P910 + P911 + P912 + P913 + P914 + P915 + P916 + P917 + P918 + P919 + P920 + P921 + P922 + P923 + P924 + P925 + P926 + P927 + P928 + P929 + P930 + P931 + P932 + P933 + P934 + P935 + P936 + P937 + P938 + P939 + P940 + P941 + P942 + P943 + P944 + P945 + P946 + P947 + P948 + P949 + P950 + P951 + P952 + P953 + P954 + P955 + P956 + P957 + P958 + P959 + P960 + P961 + P962 + P963 + P964 + P965 + P966 + P967 + P968 + P969 + P9						

Language

NOTE: As KLARA is bilingual, users are only shown the risk assessment in the language they are logged in. IGV policy is to make those documents available in English to make them useful for everyone in the institute.

Questions answered with selection buttons will automatically be translated into the other language:

Name (Describing name, not just abbreviation) :
 Syraddiskning
 Acid wash

Valid only for department :  Geokemi

1. State the premises in which the activity is taking place ⓘ
Geohuset R322b

2. Description of activity ⓘ
Acid wash for cleaning glassware/sample containers/..
- within an acid-proof fumehood, a plastic box is filled with 3M hydrochloric acid (diluted from 35% acid)
- items to be cleaned are placed in this acid bath for 1h, if required longer (overnight)
- items are removed from the acid bath and placed in a plastic box with MilliQ water for >1h/over night
- items are rinsed with MilliQ water to remove any remaining acid

4. Chemicals inherent risk ⓘ

☐ a: Very high risk ☒ b: High risk ☐ c: Moderate risk ☐ d: Low risk

4. Kemikaliernas inneboende risk ⓘ

☐ a: Mkt hög risk ☒ b: Hög risk ☐ c: Måttlig risk ☐ d: Låg risk

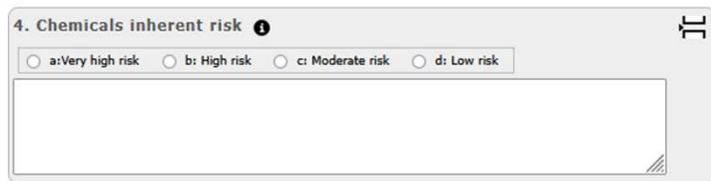
But text fields will be empty, even in the pdf version!

Unless you want to translate your risk assessment to both languages, please copy the English text to both versions, using the copy button in each text field

The show button shows the text written in the other language



Quantification of risk



4. Chemicals inherent risk ⓘ

☐ a: Very high risk ☐ b: High risk ☐ c: Moderate risk ☐ d: Low risk

Empty text area for notes.

1. Risk due to the chemicals used is automatically determined by KLARA, based on the chemicals you have entered.



5. Level of exposure ⓘ

☐ High ☐ Moderate ☐ Low

Empty text area for notes.

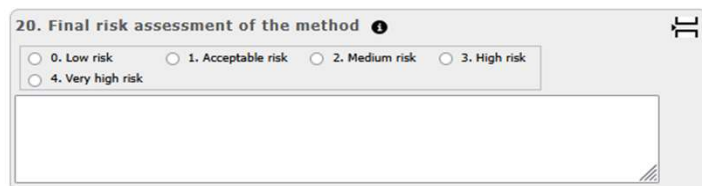
2. How the chance of exposure is, is determined by you. Feel free to point out critical moments in the method here.



5. Level of exposure ⓘ

• Moderate

Analysis does not require direct contact with solvents, potential exposure could only occur when mixing solvents, changing or refilling solvent bottles and or cleaning instrument parts.



20. Final risk assessment of the method ⓘ

☐ 0. Low risk ☐ 1. Acceptable risk ☐ 2. Medium risk ☐ 3. High risk

☐ 4. Very high risk

Empty text area for notes.

2. How the final risk of the method is, is also up to you to determine, taking into account the factors 1 and 2.

Participants



21. Participants in the assessment ⓘ

A large empty rectangular text box for input, with a small icon in the bottom right corner.

If you are the one who made the assessment, write your name here. Add the name of any students/coworkers that are using the method, plus e.g. someone who original created the method and could be asked about details. If anyone new starts working with an existing method, go through the accessment with them and add their name (unless you do any changes in the assessment/method itself, you don't have to go through the re-approval for that)

Level of detail

- As an experienced researcher, lots of things probably seem obvious, and you don't want to put too much time into writing them down. However, think about who the risk assessment is for, do your students know all those “basic things”? And if you go through the effort of making a risk assessment, why not make it useful for future use as well ;-)

10. Specification of storage Ventilated cabinet Storage of solvents not currently in use with the instrument are stored in the ventilated solvent cabinet i R204. Solvent bottles used for ongoing analysis are placed in (instrument-specific) spill-safe boxes under localized ventilation on top of the instrument and are connected via silicone tubing to the instrument inlets.	
11. Do not store together with Acid	
12. Requirements regarding protective signs Chemicals All solvent bottles are marked with the respective hazard signs.	
13. Personal protective equipment No protective clothing required for sample analysis/instrument operation. For solvent change/preparation and instrument maintenance/cleaning, gloves should be used (see solvent handling in risk assessment "organic geochemistry")	
14. Describe the technical equipment - HPLC-MS instrument operated via software - sample vials to be placed in autosampler - solvent bottles as carriers and for flushing, connected to instrument	
15. Environment	
16. Waste management Chemical waste Solvent waste produced during analysis is collected in two glass bottles located in spill-safe boxes beneath the instrument. Those are emptied regularly and the contents handed over to the hazardous waste facility (Arthenus Ruis, room M212).	
17. First aid and readiness to accident, fire and overflow - First aid kit - Fire extinguisher foam - Fire extinguisher carbonic acid - Fire blanket - Absorbing substance No safety equipment is required for normal operation. However, absorbing substance for chemical spill (vermiculite) is located in all laboratories. Emergency and eye showers as well as fire blankets and fire extinguishers (foam, powder and CO2) are located in the corridor outside the laboratory.	
18. Hazardous actions - Power failure - Ventilation failure	
19. Special instructions to other personnel	
20. Final risk assessment of the method 1. Acceptable risk	

Ready?

Change status
to "finish"

Risk assessment are
re-evaluated once a year
→ set the date to next year

Fill in prefect's name

Don't forget to save!

Status ⓘ

The assessment is:

☒ Started ☐ Finished ☐ Approved

Date of re-assessment ⓘ

2020-07-01 ✖

Person signing (Manager) ⓘ

Magnus Mörtz

Created 2020-05-12 By: Julia Steinbach
Modified 2020-05-14 By: Julia Steinbach

Show

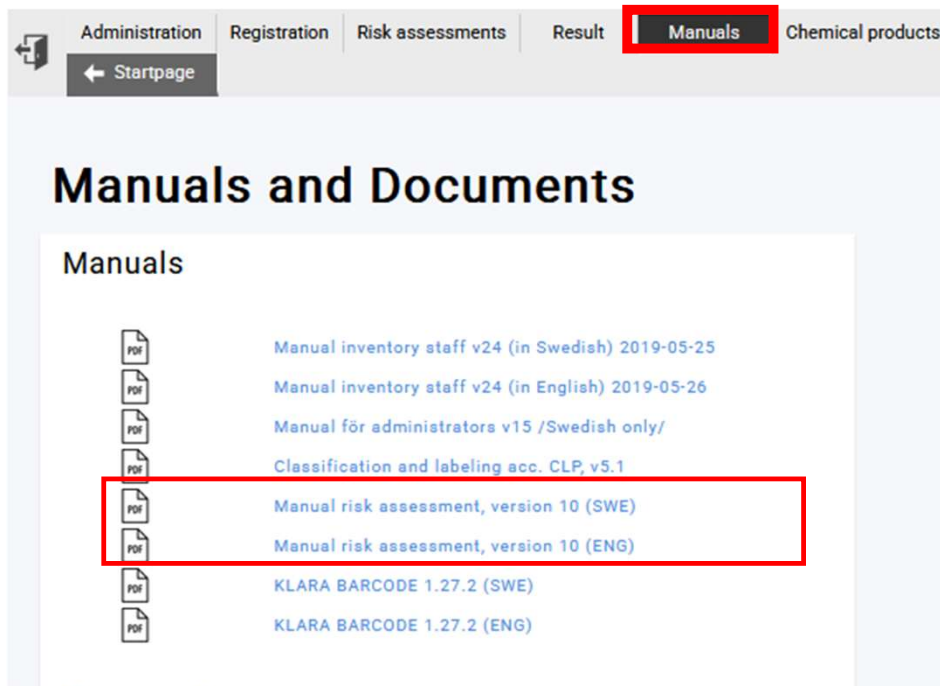
Save

Copy

Delete

Be careful with that button!
Once a risk assessment is deleted
there is no way to get it back...

More questions?



The screenshot shows the KLARA web application interface. The top navigation bar includes links for Administration, Registration, Risk assessments, Result, **Manuals** (highlighted with a red box), and Chemical products. Below the navigation bar is a 'Startpage' button. The main content area is titled 'Manuals and Documents'. Under the 'Manuals' sub-header, there is a list of documents, each with a PDF icon and a link. The following table represents the data shown in the screenshot:

Document Title	Version / Date
Manual inventory staff	v24 (in Swedish) 2019-05-25
Manual inventory staff	v24 (in English) 2019-05-26
Manual för administrators	v15 /Swedish only/
Classification and labeling acc.	CLP, v5.1
Manual risk assessment	version 10 (SWE)
Manual risk assessment	version 10 (ENG)
KLARA BARCODE	1.27.2 (SWE)
KLARA BARCODE	1.27.2 (ENG)

A red box highlights the 'Manual risk assessment, version 10 (SWE)' and 'Manual risk assessment, version 10 (ENG)' links.

*Check the manual in KLARA or
ask your local KLARA admin!
(Julia or Carina)*