

Student RiskAssess User Guide

http://www.riskassess.com.au in Australia http://www.riskassess.ca in Canada http://www.riskassess.co.nz in New Zealand

Background

Student RiskAssess allows students to carry out risk assessments as required for the new Australian Curriculum for Science, for the International Baccalaureate, and for extended investigations (student-initiated experiments). Student RiskAssess has been customized for student use in school science laboratories, and has all the usual features of RiskAssess. However, the student subscription has a different login and password to the usual school subscription and, therefore, students do not have access to the risk assessments created in RiskAssess by teachers and laboratory technicians.

Schools are legally required to conduct a risk assessment before each laboratory experiment. Each person is required to carry out a risk assessment for the actual tasks that they are going to do. It is not possible to do a risk assessment for another person. A student (or a group of students) agrees to conduct each experiment safely in accordance with school rules and teacher instructions. The students assess the risks for the experiment and specify the control measures to ensure the risk level is low. The student risk assessment is checked by the teacher, who certifies that the risk level and control measures entered by student(s) are appropriate. The laboratory technician assesses the risks for preparing the package of equipment and chemicals for the class, and then for disposing of these items afterwards, as required.

Student RiskAssess provides a convenient and rapid method to meet these legal obligations. It also helps avoid accidents with up-to-date safety information on equipment, chemicals and living things. Student RiskAssess saves time for students, teachers and laboratory technicians by providing a risk assessment template, automatic equipment ordering and laboratory scheduling. It also saves paper and filing, by using electronic documents and electronic signatures. Student RiskAssess can be used on computers, iPads (and other tablets) and on smart phones (iPhone, Android, etc). Student RiskAssess can be accessed from home or from any location with an internet connection.

Student RiskAssess can be operated in two different ways:

- 1. Not linked to the school's RiskAssess subscription
- 2. Linked to the school's RiskAssess subscription

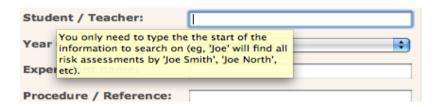
The advantage of linking the two subscriptions is that staff can use Student RiskAssess for student assessment purposes, since a PIN feature is enabled. This feature allows students to create risk assessments that are PIN protected and can only be viewed by staff and that particular student. We recommend that you use this optional feature (see later section on *Using Student RiskAssess for Assessment*

Purposes). It should be noted that some of the screens are slightly different, depending on whether the subscriptions are linked or not. These differences will be explained in the relevant sections of the User Guide.

This Guide and Onscreen Help Within Student RiskAssess

This guide will help you get started with Student RiskAssess. It also provides hints and suggestions for getting the most out of Student RiskAssess.

The Student RiskAssess system is easy to use, and has help information onscreen next to fields and buttons. Further help is available when you hover your mouse pointer over boxes and buttons – often you will see further information appearing in a yellow box.



Login and Home Page

Students or staff can log into Student RiskAssess at the same web address as for RiskAssess. The Student RiskAssess login (user name and password) relates specifically to the student subscription for your school campus. It is different to your school's user name and password for RiskAssess. This means that students will not be able to access your school's RiskAssess subscription using the Student RiskAssess user name and password.

Staff can be using RiskAssess and Student RiskAssess at the same time as students are using Student RiskAssess. Any number of students from your school campus can use Student RiskAssess at the same time. Students or staff from other schools cannot view the risk assessments generated by your school campus.

The easiest way for a staff member to use both Student RiskAssess and RiskAssess at the same time on the same computer is to log into RiskAssess for staff at the normal web address. Then, in a new tab/window, open the following: www.student.riskassess.com.au (Australia), www.student.riskassess.ca (Canada) or www.student.riskassess.co.nz (New Zealand) and log in. Alternatively, log in using a different browser for each subscription, or log in using a private viewing window for at least one of the subscriptions. Student RiskAssess has a green background, as compared to the light brown background of RiskAssess.

Student RiskAssess subscription not linked to the staff RiskAssess subscription

When you first log into Student RiskAssess, you will see the home page for your student subscription and the school campus. You can return to the home page at any time by clicking anywhere in the photo of the bottles.



Each risk assessment you perform will be saved on the Student RiskAssess system. The last five risk assessments performed at your school are shown in the "Recent Risk Assessments" box. The name of the student(s) is shown next to the name of each experiment. If you would like to see more than the five recent risk assessments shown on the home page, click the "See more..." link in the "Recent Risk Assessments" box. You can also find risk assessments performed at your school using keywords in the "Risk Assessment Search" box on the right. See later section on Searching for Previous Risk Assessments for more details.

The "Laboratory Scheduling" provides a day-by-day view of experiments in your school, and is particularly useful for scheduling experiment preparation and for communicating between students, teachers and laboratory technicians. Risk assessments for future experiments and past experiments can be viewed. See later section on *Laboratory Scheduling* for more details.

The "Safety Information Search" lets you do a quick search on any item in the database (eg chemical, equipment or living things) to find out safety information about it, without generating a risk assessment.

"Labelling" allows you to print labels for pure chemicals and solutions. See later section on *Labelling* for more details.

"RiskAssess News" keeps you up-to-date on the latest new features and improvements in the RiskAssess system.

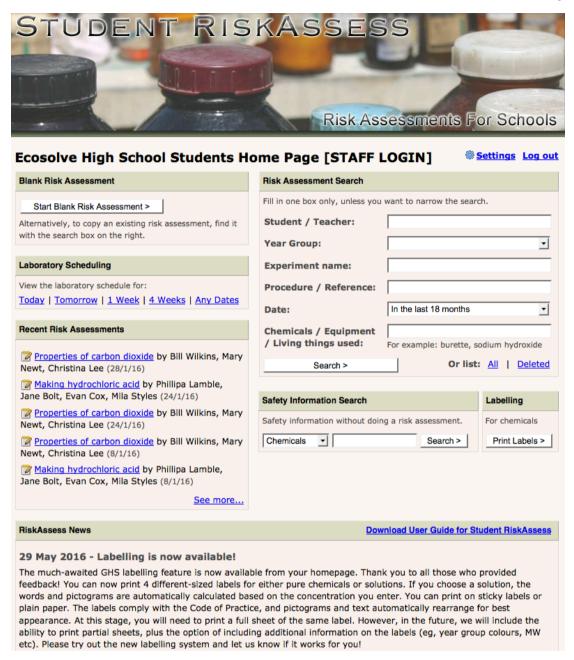
"Log Out" allows you to leave the RiskAssess website.

Student RiskAssess subscription linked to staff RiskAssess subscription

If you log in with the student user name and student password, you will see a similar screen to the unlinked screen image above, except "**Laboratory Scheduling**" will not be displayed.

If staff log in with the student user name and staff password, they will be able to see all the students' risk assessments and the scheduling page. The home page looks slightly different to the unlinked version in that it is labelled "[STAFF LOGIN]", has the "Settings" option and access to "Laboratory Scheduling". Otherwise it is identical.

"Settings" allows staff to check when the school's RiskAssess subscription expires and to download an invoice to renew your school's subscription. Staff can also update the contact person details at the school. Please note that "Settings" will only be displayed and available in Student RiskAssess if staff enter the staff password when they log in. For security reasons, "Settings" will not be displayed when students log in using their student password.



Your First Risk Assessment

Click the "Start Blank Risk Assessment >" button, and you will be presented with the risk assessment form. A student or group of students, a teacher or a laboratory technician can initiate a risk assessment for an experiment.

Each student should enter his/her own name in the section called "Student name(s):". Students agree when entering their names in this section that they will each conduct the experiment in accordance with school rules and teacher instructions. Enter only one student name per line. Please note the PIN option is only available if the Student RiskAssess subscription has been linked to the Staff RiskAssess subscription (see later section on *Using Student RiskAssess for Assessment Purposes*).

| Risk Assessment and Practical Order | | | |
|---|--|--|--|
| School: | Ecosolve High School Students | | |
| Student name(s): Enter one name per line. | By entering my/our name(s), I/we agree to conduct this experiment safely in accordance with school rules and teacher instructions. | | |
| | Bill Wilkins Mary Newt Christina Lee | | |
| PIN (4 or 5 digits): PIN is optional. | If you enter a PIN, it will be required to access this risk assessment. Ensure you write it down or remember it. | | |
| Experiment name: | Properties of carbon dioxide | | |
| Text reference: (or procedure) Can include web links. Eg, http://www.example.com | S&B p67 In addition, pour carbon dioxide from test tube into beaker to extinguish taper. see also www.experiment3.com.au | | |

For the "Text reference: (or procedure)", you can include links to the school intranet or to the world wide web (such as http://intranet/lab.pdf or www.example.com/lab.pdf), and they will be automatically turned into clickable hotlinks in the resulting risk assessment (you may need to contact your IT Department to find out the correct format for intranet links at your school). Each link will open in a new window when clicked. This is helpful if you are referring to experiments, (M)SDSs, etc on the web, or on your school intranet. Alternatively, you can write out a procedure in detail, refer to one of your standard procedures by name, or simply provide a reference to a text. You can also copy and paste text from another document into the box. You may wish to divide the procedure into two sections: procedure for the classroom experiment, and procedures for preparation (before) and cleanup (after). This is to distinguish the activities of the student(s) and the laboratory technician.

Next, you enter information about classes and preparation:

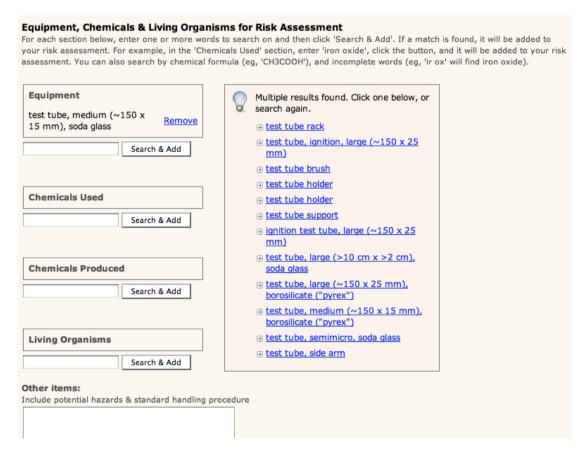


"Chemical user codes" are compulsory in NSW Government schools and are listed in the NSW CSIS package. The RiskAssess team recommends their use in all schools. If you click the "Explanation of codes" link, you will get further details about these codes. If you enter numbers into the boxes for the codes, RiskAssess will automatically check the user codes of chemicals against those of the users. Further information about certain chemicals has become available since the release of the NSW CSIS package in 1999, so RiskAssess has made changes to some of these codes and the changed codes are shown in brackets. If you do not want to use this feature, do not enter any numbers in the boxes for the codes.

The "Scheduling" section allows you to specify when and where the experiment will take place. Filling in these fields allows you to use the automatic laboratory scheduling system (see later section on *Laboratory Scheduling*).

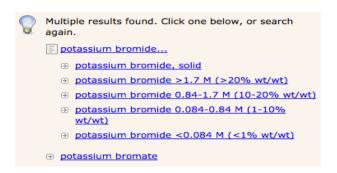
The "Equipment/chemicals to be prepared by laboratory technician" and "Scheduling notes" allow communication of requirements between student, teacher and laboratory technician (see later section on Ways to Use Student RiskAssess at Your School for more details).

Choose the equipment, chemicals and living things for the experiment. Type each item in the appropriate box and either click the "Search and Add" button or press the "return" key to locate it in the database. It is important to enter 'Chemicals Produced' as well as 'Chemicals Used', as sometimes the chemicals produced may pose a major risk.



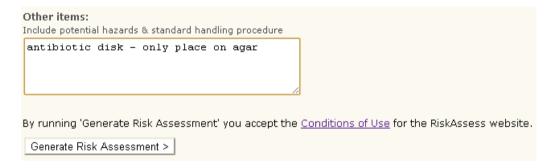
When searching, you can enter the first part of a word. For example, if you enter 'spat' and click the "Search and Add" button, 'spatula' will be automatically

entered. If there are several options that match the letters you have entered in the text box, a list will come up and you can click the appropriate option to be automatically entered. You may need to click a category of chemicals, to be able to see the list of chemicals within it.

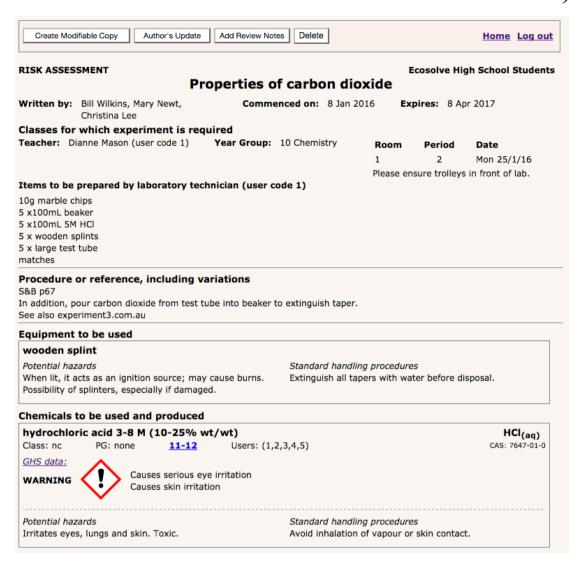


You can also search using a lower-case chemical formula. For example, 'h2so4' will find 'sulphuric acid' at its various concentrations. Remember to include brackets, if required in the formula.

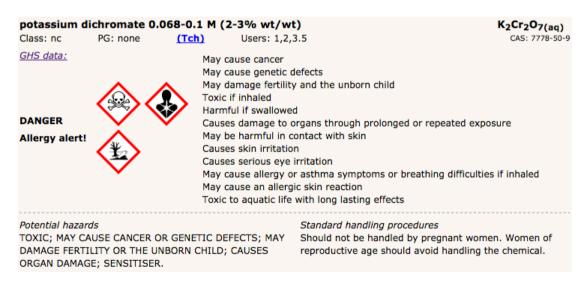
If you cannot find an item of equipment, a chemical or a living organism in the database, enter it in the "Other Items" text box at the end, along with any known potential hazards and standard handling procedures.



When you have completed the form, read the "Conditions of Use" and click "Generate Risk Assessment >". You will then see the resulting risk assessment form with information on equipment, chemicals and living things incorporated from the Student RiskAssess databases. The next image is abbreviated to save space in the guide - it has further sections.



On 1 January 2016, Globally Harmonized System of Classification and Labelling of Chemicals (GHS) data were added to the information on chemicals. GHS data have been inserted for each pure chemical and each solution as a new "GHS band" between the two heading lines and the sections on "Potential hazards" and "Standard handling procedures".



From left to right, the GHS band provides:

Signal word Pictograms Hazard statements

GHS data are separated by a dotted line from RiskAssess advice on "Potential hazards" and "Standard handling procedures", which have both been updated in light of the new GHS information. For further details about GHS and the meanings of the pictograms etc, click "GHS data:". In cases where the possibility of allergic reaction is mentioned in the hazard statements, an "Allergy alert!" is included beneath the signal word.

All risk assessments created after 1 January 2016 will automatically include GHS data for chemicals.

If you want to change any entry in the risk assessment, click the "Author's Update" button at the top. This takes you back to the form, and you can fix any errors or omissions. "Author's Update" should NOT be clicked to customise the risk assessment for an experiment taking place on a different day, or performed by a different teacher. Click "Create Modifiable Copy" for this situation. See the later section on Sharing and Customising Risk Assessments for more information.

Copying and updating risk assessments created prior to 1 January 2016

Any risk assessment you created prior to 1 January 2016 will still be accessible in the original format (with no GHS chemical data included), but will show a notice at the top that it was created before GHS data were introduced into RiskAssess. In many cases, when you next update (by clicking "Author's Update") or copy (by clicking "Create Modifiable Copy") this risk assessment, RiskAssess will automatically add GHS data for the chemicals and solutions included in the new risk assessment. However, in cases where a chemical in the previous risk assessment corresponds to more than one chemical in the new system, RiskAssess cannot automatically choose a direct match and a help box will appear. Chemicals with no direct match are shown in red, and have a "GHS >>" link next to them. Clicking the "GHS >>" link will let you choose the appropriate chemical with GHS data.



Before you can update or generate the new risk assessment, you need to choose the equivalent chemical(s) with GHS data that RiskAssess was not able to convert automatically. You will only need to do this once for each risk assessment created before the GHS data were introduced, provided you make further modifiable copies or author updates from the converted risk assessment.

As there are now many more chemicals and solutions to choose from in the database, you should always review your new risk assessment to ensure that RiskAssess has automatically updated the correct chemicals with the new GHS data.

The Actual Risk Assessment

You carry out the actual risk assessment when you consider the risks listed under the heading "Risk assessment".

| Knowledge | | | | | | |
|--|-------------------------|----------------------------------|-------------------------------|--|--|--|
| ∃ I/we have read and understood the potential hazards and standard handling procedures of all the equipment, chemicals and living organisms. | | | | | | |
| ∃ I/we have read and understood the (Material) Safety Data Sheets for all chemicals used and produced. | | | | | | |
| ∃ I/we have copies of the (Material) Safety Data Sheets of all the chemicals available in or near the laboratory. | | | | | | |
| teacher instructions. | • | ct this experiment safely in acc | ordance with school rules and | | | |
| Risk assessment | les of | | | | | |
| I/we have considered the ris | KS OF: | | | | | |
| → fire | → breakage of equipment | electrical shock | radiation | | | |
| explosion | outs from equipment | ⊕ escape of pathogens | → waste disposal | | | |
| | sharp objects | → heavy lifting | inappropriate behaviour | | | |
| inhalation of gas/dust | ortating equipment | → slipping, tripping, falling | → allergies | | | |
| | → vibration and noise | → falling objects | → special needs | | | |
| | → pressure | → heat and cold | → other risks | | | |

Your personal knowledge, all the Student RiskAssess database information and the data included in each relevant chemical (Material) Safety Data Sheet or (M)SDS, provide the basis for your risk assessment. You must carry out a risk assessment for the actual tasks you are going to do.

A student (or a group of students) assesses the risks for the experiment and records the control measures (if applicable) required to ensure that the risk level is low. It is not possible to do a risk assessment for another person. The teacher certifies that they have checked and agreed with the risk level and control measures entered by the student(s). A laboratory technician assesses the risks for preparing the package of equipment, chemicals and living things for the class, and then disposing of the items appropriately afterwards.

Student RiskAssess is a tool that provides information, a template and a structure in which students may do their own risk assessments, while ensuring that a teacher checks that the student risk assessment is complete and accurate, and that adequate control measures have been proposed by the student(s).

The risk assessment form follows the ISO Standard 31000:2009, Risk Management – Principles and Guidelines. When you identify a risk from the checklist, you need to consider its 'likelihood' and its possible 'consequences'. The 'severity' of the risk is assessed using the School's risk matrix (also known as risk level matrix). Click the "School's risk matrix" link for sample risk matrices and further information.

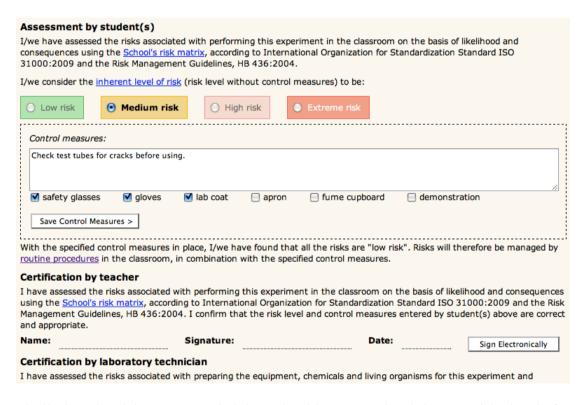
It is recommended that your school obtain copies of ISO Standard 31000:2009 and the Risk Management Guidelines HB 436:2004, and that persons carrying out risk assessments be familiar with them. Copies of these documents may be obtained from your national Standards Organization.

The logic of the risk assessment process is as follows:

First of all, you assess the 'inherent level of risk' for an experiment, that is, the risk level without any extra control measures in addition to your routine procedures. Control measures are measures put in place to make an activity safer. Click the appropriate button: "Low risk", "Medium risk", "High risk", or "Extreme risk" to describe the inherent risk level.

If the inherent risks can be managed by routine procedures in the classroom (and no additional control measures are required), the inherent level of risk should be assessed as "Low risk" by the student(s). The student(s) should complete the relevant section to state that the risk level is 'low'. The teacher certifies that the risk level entered by the student(s) is correct.

If you click the **"routine procedures"** link, you will be taken to a page containing some suggestions by the RiskAssess team for the sorts of routine procedures that your school might consider adopting. This page also includes a link to a page that describes procedures and issues relating to the safe culturing of microorganisms.



Similarly, the laboratory technician should assess the inherent risk level for preparation/cleanup as 'low', if no additional control measures are required.

If the inherent risk level is 'medium' or greater for either the classroom experiment or the preparation/cleanup, the relevant person needs to enter adequate control measures in the appropriate text box to reduce the risk level to 'low' and click on "Save Control Measures" to save the control measures in the risk assessment form. You can edit your entry or add control measures by clicking "Update Measures". Remember to click "Save Control Measures" each time you complete an entry. Sufficient and appropriate control measures will need to be put in place so that the risk level is reduced to 'low risk', with the control measures in place. If you cannot add adequate control measures to reduce the risk level to "low risk", you should NOT

perform this experiment. There are tick boxes available for commonly used control measures such as safety glasses, gloves etc. The student should complete the student assessment section, and the teacher should sign the appropriate certification section to confirm that appropriate control measures are in place to reduce the risk level to 'low risk'. Similarly, the laboratory technician should sign that adequate control measures are in place to reduce the risk level of preparation/cleanup to 'low' risk. Electronic signatures of both the teacher and the laboratory technician are required for Student RiskAssess to automatically archive the risk assessment. See the later section on *Archiving Risk Assessments* for more information.

If the classroom component of the experiment has a 'high' or 'extreme' level of inherent risk, additional approval will need to be obtained from an authorized person. Click on "authorized person" for details.

| Approval by Authorized Person | | | | | |
|--|--|--|--|--|--|
| An authorized person, e.g. Head of Department or Principal, is required to approve the experiment when the inherent level of | | | | | |
| isk in the classroom is "high" or "extreme") | | | | | |
| I note that the inherent level of risk for this experiment is "high" or "extreme". As an authorized person, I approve this | | | | | |
| experiment, on the condition that the above control measures are put in place in the classroom. | | | | | |
| Name: Signature: Date: Sign Electronically | | | | | |

As classroom experiments with a 'high' or 'extreme' level of inherent risk have the greatest potential to cause injuries, it is important that an authorized person check that adequate control measures have been put in place to reduce the risk level to 'low risk'. In this case, electronic signatures of the teacher, the laboratory technician and the authorized person are required, prior to the risk assessment being archived automatically. See the later section on *Archiving Risk Assessments* for more information.

When you first generate a risk assessment form, no inherent risk level is assigned. Once you choose an inherent risk level, the form will automatically change to show only the relevant control measures and signature boxes. Even if you are printing the risk assessment rather than archiving it electronically, we recommend you select the inherent level of risk and enter control measures (if required) using Student RiskAssess, as this will decrease the number of pages you will need to print.

Signing of Risk Assessments

Students do not sign electronically. It is up to the school to decide if students should sign printed copies of their risk assessments (see later section on *Printing and Emailing Risk Assessments*). There is space for signatures in the section called "Agreement by student(s)".

Agreement by student(s)

I/we, Jane Morgan, Justin Smith, Devi Sharma, agree to conduct this experiment safely in accordance with school rules and teacher instructions.

Student RiskAssess contains an electronic signing feature for use by both the teacher, and the laboratory technician (and the authorized person, if necessary). When you click the "Sign Electronically" button, a new box will appear. You should enter your full name into the appropriate box and refer to the note below the signature.

| Enter your full name: | Sign > Cancel |
|---|--|
| By entering your name in the box above, you are providing an electronic name with a pen and as such will constitute a legally binding agreement warranty in respect to fraud or security breach resulting from the use of | t between the relevant parties. We can give no |
| If the risk assessment is changed (using the 'Author's Update' button of electronic signature will be automatically removed. | r changing risk level or control measures), this |

If a later signatory changes the inherent level of risk or the control measures of an earlier signatory, the earlier electronic signature will be removed. This is a quality control measure, which allows the teacher and the laboratory technician (and the authorized person) to review each other's risk assessment, as encouraged by safety authorities. The signatory whose signature has been removed will need to check the changes and electronically sign the risk assessment again.

Should you decide not to use the electronic signature feature, you can always print the risk assessment (see later section on *Printing and Emailing Risk Assessments*), and sign the appropriate sections by hand.

Archiving Risk Assessments

Student RiskAssess has an automatic archiving feature. When two electronic signatures (or three, in a case where the inherent risk is 'high' or 'extreme' in the classroom) have been attached to a risk assessment, the risk assessment is automatically stored in the Student RiskAssess system as an archival electronic document in PDF format (that is, a non-modifiable format) valid for legal purposes. You should make a back-up copy of your archived risk assessment on your school system (see later section on *Long-term Storage of Risk Assessments*), as Student RiskAssess does not guarantee to store your risk assessments.

Keeping Track of Electronic Signing of Risk Assessments

To help you track which risk assessments have been signed electronically, different icons are used whenever risk assessments are listed:



Has not yet been signed electronically by all required parties and can be updated with "Author's Update".



Has been signed by all required parties, can no longer be updated using "Author's Update" and has been automatically archived. It can only be copied using "Create Modifiable Copy". See later section on *Sharing and Customising Risk Assessments* for more details.

Printing, Emailing and Saving Risk Assessments

You can click the "Print" button at the bottom of a generated risk assessment to print directly from the web page. However, the quality of the printout will depend on the print settings in your chosen browser. For consistently high quality printing, it is better to click "Save / Print PDF" and then print from the PDF document, which has been appropriately formatted by the Student RiskAssess system. You can also save

the PDF document to a sub-directory or folder on your school computer for back-up purposes (see later section on *Long-term Storage of Risk Assessments*).

If you wish to email the risk assessment, enter the email address of the recipient in the appropriate box. If you wish to email the risk assessment to several people, enter the email addresses with a; (semicolon) between them. When a recipient receives a risk assessment by email, the email will include summary information about the risk assessment. This summary information shows up in the text of the email, so the recipient of the email can see more about the risk assessment without having to open the attached PDF file. The email also includes a link to the risk assessment in the Student RiskAssess system, making it quick and easy to check and then sign electronically.

The "Email", "Print" and "Save / Print PDF" buttons are all at the bottom of the generated risk assessment, since they are generally used after reading the risk assessment (you may need to scroll down to see them).



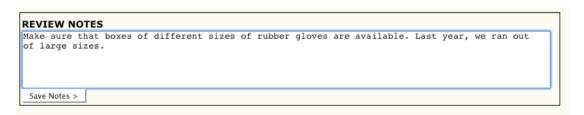
Reviewing Your Risk Assessments

By law, you are required to regularly review your risk assessments. RiskAssess provides a date when the risk assessment "Expires". This expiry date is 15 months after the date the risk assessment was commenced and is provided to remind you to review your risk assessment by that date.

If you are using RiskAssess and then printing out your risk assessments (see later section of "Ways to Use RiskAssess at Your School", you should manually add your comments, problems or ideas in the "Monitoring and review" section at the end of the risk assessment.

Monitoring and review This risk assessment will be monitored using comments below and will be reviewed within 15 months from the date of certification.

If you are using RiskAssess to store your risk assessments electronically, you can keep track of modifications, problems or ideas about the experiments by clicking the button for "Add Review Notes", which is provided at the top of the page. A new window will appear and you can enter your notes and click "Save Notes".



You can update the review notes by clicking "Update Review Notes", entering changes and clicking the "Save Notes" button. Each time you click the "Save Notes" button, the information entered here is stored with the risk assessment and is available whenever the risk assessment is viewed again.

| Create Modifiable Copy Author's Update Delete | <u>Home</u> | Log out |
|---|-------------|-----------|
| REVIEW NOTES Make sure that boxes of different sizes of rubber gloves are available. Last year, we ran out of large s Update Review Notes | izes. | |
| RISK ASSESSMENT E | coSolve Hig | gh School |

Searching for Previous Risk Assessments

Student RiskAssess has a "Risk Assessment Search" box on your school home page that allows you to search for a particular risk assessment created at your school. For example you can search for the risk assessment using the Experiment Name and the Student/Teacher's name, or any other combinations of the categories of key words shown in the "Risk Assessment Search" box. You only need to enter one part of the name in "Student/Teacher:" field. For example, if you type in 'Joe', all risk assessments by 'Joe North' or 'Joe Smith' will be listed. Similarly you only need to enter a few key words in the "Experiment name:" field, rather than the full title. Once you click the "Search>" button, Student RiskAssess will produce a list of all risk assessments containing those key words. You can sort the results by clicking the column heading you wish to sort by. For example, click on the 'Date' heading to sort all of the search results in order from most recent risk assessment to oldest risk assessment. Clicking a second time on the column heading will reverse the sort (for example, from oldest to most recent). The arrow next to the column heading shows the direction of the sort. Click on the appropriate risk assessment to retrieve it.

The "Recent Risk Assessments" box is visible on the home page and contains the last five risk assessments that have been created at your school. You may retrieve a risk assessment from this list, by clicking on it. If you would like to see more than the five recent risk assessments shown on the home page, click the "See more..." link in the "Recent Risk Assessments" box.

You can obtain a list of deleted risk assessments by clicking on the "Deleted" link (see later section on *Deleting and Undeleting Risk Assessments*) in the "Risk Assessment Search" box. You can obtain a list of all risk assessments generated at your school by clicking on the "All" link in the "Risk Assessment Search" box.

Sharing and Customising Risk Assessments

You should generate a risk assessment for a particular experiment, performed by particular students in a given room, for a particular period and date. The reason is that, by law, you must take into account 'all relevant matters'. This includes the behaviour of the students (which greatly affects what can be done safely), the facilities available (e.g. fume cupboard), students with special needs, students with allergies, experience of staff, etc. Should you want to repeat the same experiment at a different time, place or students, you should generate a new risk assessment with the appropriate details. You can do this easily through Student RiskAssess by clicking on the "Create Modifiable Copy" button. This new risk assessment will have all of the information that the old one had (except the scheduling and Teacher information). It can then be customised by entering any changes in procedure, the correct students and

teacher names and the appropriate scheduling information relating to room, period, date etc. This approach allows you to use the automatic laboratory ordering and scheduling system, and complies with the legislation, as those performing the experiment are signing a risk assessment of the exact experiment they will be carrying out (that is, for a particular period, on a particular day, in a particular room).

The Student RiskAssess system makes it very quick and easy to copy and customise existing risk assessments created by yourself or other staff, to save you time. First, find the risk assessment you want to customise. See earlier section for *Searching for Previous Risk Assessments*. This can be an archived risk assessment, or one still in editable form (a risk assessment before all the appropriate electronic signatures have been added). Once you have found the relevant risk assessment, and read the "Review Notes" (if present), click the "Create Modifiable Copy" button at the top of the page. If the risk assessment was created prior to the introduction of GHS data, see above section on *Copying and updating Risk Assessments created prior to 1 January 2016*.



You will then have your own editable copy of the risk assessment. All the fields will be the same as the original risk assessment, except those relating to the teacher and the scheduling information. These fields will be blank and will need to be customised with the appropriate information. You should review and further customise the risk assessment to reflect your own experiment. You can update any of the entries in the risk assessment by clicking "Author's Update", if it has not been archived yet.

Using Student RiskAssess for Assessment Purposes

Student RiskAssess can be used for assessment purposes, if you link your school's Student RiskAssess subscription to your staff RiskAssess subscription (details on how to do this are described below). Once the subscriptions are linked, a PIN feature is enabled, allowing students to set a PIN on the risk assessments they create. This PIN is required by students to view or edit their own risk assessments. Having risk assessments PIN-protected means students cannot view/copy each other's work. Staff, however, are still able to access all risk assessments.

The PIN feature in Student RiskAssess can be used in a variety of ways. The simplest is to ask all students to choose their own PIN when they create a risk assessment. Each student should use the same PIN on all their own risk assessments (if they have several) and choose a hard-to-guess PIN (eg, 43085 not 0000). An alternative is for staff to issue each student with a random PIN to use. Staff can view all student risk assessments and their PINs. If a teacher wants a particular risk assessment to be visible to all the students (eg a template for students to copy from), the PIN field should be left blank.

Linking your school's Student RiskAssess subscription with your school's staff RiskAssess subscription to enable the PIN feature

Linking your school's Student RiskAssess subscription to your staff RiskAssess subscription needs to be done ONCE only. This is so that staff can log into Student

RiskAssess using their staff password, and have access to all risk assessments without needing a PIN. In other words, the staff will have unlimited access, while the student will only be able to open their own PIN-protected risk assessments, plus any risk assessments that are not PIN-protected.

To link the Staff and Student RiskAssess subscriptions:

- 1. Log into the STAFF subscription to RiskAssess at www.riskassess.com.au
- 2. Click the "**Settings**" button next to the "**log out**" button at the top right corner of your home page.
- 3. Scroll down to section titled Student RiskAssess and PINs
- 4. Click "Link your Student Subscription >" button
- 5. Enter your Student subscription username and password and click the "Link >" button.

You will get a confirmation message "Linked student subscription and student PIN system enabled".

Now when your students log into Student RiskAssess, they will have the option of setting a PIN when they start a new risk assessment or edit an old one (if it does not have a PIN already).

When Staff log into Student RiskAssess, they should use the Student RiskAssess username, but the STAFF password. They then have access to all risk assessments.

It is strongly recommended that the Staff RiskAssess password is **NOT** easily able to be guessed by students. For example "science" is not regarded as a strong password! To change the school's password, the school's contact person should email info@riskassess.com.au with the username, current password, and the new password that your school would like to use. Once we have changed the password, we will email the contact person to confirm that the change has been made.

The following is an example of log in details for a school with both Staff and Student RiskAssess:

Staff username: sls

Staff password: 2000potassium

Student username: slsstudents Student password: scistud

Students would still log in to Student RiskAssess with slsstudents/scistud and use PINs to protect their work. Once the PIN feature is enabled, the student password will no longer allow students to access the "Laboratory Scheduling" screen.

Staff would log in to Student RiskAssess with slsstudents/2000potassium, and would have access to all risk assessments without needing to enter PINs. Staff can view or

change PINs on risk assessments (useful if students forget the PIN). Staff can access the "Laboratory Scheduling" and "Settings" screens.

Staff can find out the PIN for an individual student risk assessment by logging into Student RiskAssess with the staff password, then finding the relevant risk assessment. By clicking "Author's Update", the PIN field can be edited by the staff member, if required.

Deleting and Undeleting Risk Assessments

Occasionally, there is a need to delete a risk assessment, possibly due to scheduling difficulties or staff/student absences. Bring up on screen the risk assessment you wish to delete. When you click the "Delete" button at the top of the screen, a warning message appears asking if you really wish to delete this risk assessment. If you click "OK", the risk assessment will appear to be deleted. It will no longer show up on the "Recent Risk Assessments" list, or in "Laboratory Scheduling". If for some reason you decide you would like to recover a deleted risk assessment, go to the home page and click the "Deleted" link in the "Risk Assessment Search" box to view a list of all deleted risk assessments. Click on the relevant risk assessment and it will be brought up on screen, with a message stating that it has been deleted. If you click the button "Undelete this risk assessment" (next to this message), the risk assessment will be recovered. It will again be visible and retrievable in the usual ways.

Special Issues for Schools without Laboratory Technicians

In some schools, there is no laboratory technician. In these cases, the teacher who is responsible for the preparation before the experiment and the disposal after the experiment, should sign the section labelled 'Certification by laboratory technician' as the teacher is fulfilling this role. Once both electronic signatures are attached, the risk assessment will be archived as a legal record.

Special Issues for Laboratory Technicians

Laboratory technicians may wish to carry out risk assessments for activities, which relate to a number of laboratory classes, such as the preparation of dilute acid solutions. It is recommended that the title of these risk assessments include the words 'Standard procedure', such as 'Standard procedure: Preparation of dilute acid solutions'. These risk assessments can easily be retrieved by using the key words 'standard procedure' and the author's name in the "Risk Assessment Search" box. See earlier section on Searching for Previous Risk Assessments for more details. Since there is no classroom component for these activities, it is not appropriate for the teacher to sign the teacher's certification. Instead the laboratory technician should put N/A in the teacher's signature area, after clicking the "low risk" button. This way the risk assessment will be archived in the Student RiskAssess system in non-editable format as a legal record.

Laboratory Scheduling

The "Laboratory Scheduling" screen can be accessed from the home page only if you have logged in with the staff password after your school's Student RiskAssess subscription has been linked with the staff RiskAssess subscription (see earlier section

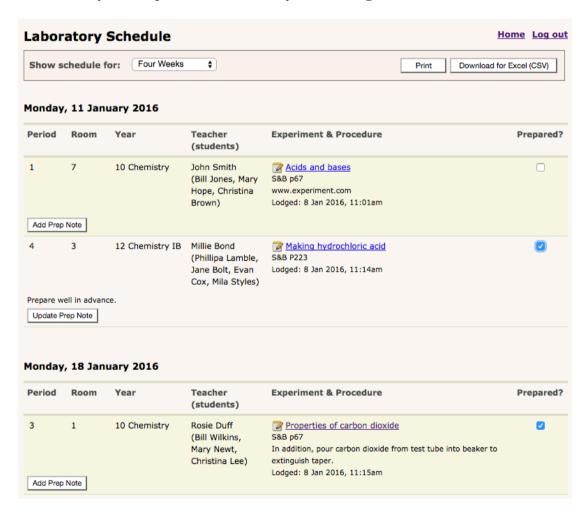
Using Student RiskAssess for Assessment Purposes), or if your Student RiskAssess subscription is not linked. Once the subscriptions are linked, students will not have access to the "Laboratory Scheduling" screen.

The "Laboratory Scheduling" screen is available for different time periods.



The "Laboratory Scheduling" screen is a day-by-day view of future and past student experiments. It shows summary information about each experiment, and also provides a link to the full risk assessment for further details and/or electronic signing. It is a separate laboratory scheduling system to that used in RiskAssess by staff.

As soon as a new risk assessment is entered in the system for an experiment, it will automatically show up in the "Laboratory Scheduling" screen.



Students can prepare their risk assessments, and then have them checked by their teachers. The teacher can email them to the laboratory technician for review, signing and preparation. Alternatively, laboratory technicians can view the scheduling screen and click the link to the risk assessments for review, signature and preparation. If laboratory technicians are checking the scheduling screen regularly, it is generally not necessary for teachers to email the risk assessments to them.

There is also a "Prepared?" tick box for each scheduled experiment. The tick box is designed to help laboratory technicians keep track of which experiments they have already prepared, and which still need preparation. The tick box also helps teachers by giving them a way to easily view that their experiment request has been received and prepared.

Prep notes can be added to a risk assessment from the lab scheduling screen by clicking the "Add Prep Note" button. These notes may be further modified by clicking the "Update Prep Note" button.

The time when the risk assessment is first lodged is automatically shown on the scheduling screen (for example - Lodged: 15 May 2016, 10:09pm). This is useful for those schools, which have a policy relating to a 'cut-off time' for experiments to be lodged in RiskAssess. It also clarifies which person has ordered an item of equipment first.

In schools where laboratory technicians initiate the risk assessments, the scheduling screen is useful to help co-ordinate preparation and to give a calendar view of future and past risk assessments.

The laboratory schedule can be printed by clicking the "Print" button on the appropriate laboratory schedule screen. If you would rather download the schedule into an Excel file, click "Download for Excel (CSV)". Fifteen different columns of data about the experiment will be downloaded. This includes data on the inherent risk levels of experiments, as required by certain school authorities. Excel will allow further sorting and manipulation of the data.

Labelling

RiskAssess allows you to print GHS-compliant labels for pure chemicals and solutions. The labels comply with the Code of Practice, and pictograms and text automatically rearrange for best appearance. From the homepage, go to the section called "Labelling" and click "Print Labels >" button.



Follow the steps 1-3.

| Chemical Labelling | <u>Home</u> | Log out |
|--|-------------|---------|
| 1. Choose Chemical | | |
| Sodium hydroxide solution Change | | |
| Concentration: 2.50 M | | |
| 2. Choose Label Size and Options | | |
| All labels are designed to be printed on to A4 paper or Avery (or equivalent) label sizes. | | |
| Extra-Small (3x8, 24 labels per page, 64 x 33.8mm, eg, Avery L7159) | | |
| Small (3x7, 21 labels per page, 63.5 x 38.1mm, eg, Avery L7160) | | |
| Medium (2x7, 14 labels per page, 99.1 x 38.1mm, eg, Avery L7163) | | |
| Large (2x2, 4 labels per page, 99.1 x 139mm, eg, Avery L7169) | | |
| Would you like to print borders on the labels? | | |
| Yes - best for normal paper, to help with cutting out | | |
| O No - best for sticky labels which already have borders | | |
| | | |
| 3. Download and Print Labels | | |
| Labels are downloaded as a PDF file for easy printing. | | |
| Print with Google Chrome or Adobe Acrobat. | | |
| Ensure you print at 100% or 'Actual Size' and do not have a 'Fit to Page' option selected. | | |
| If you want to print labels larger or smaller, and are not using sticky labels, you can adjust the print size percentage when you print. Eg, print at 80% to fit very small dropper bottles. | | |
| If you want to print multiple pages of labels, enter the number of copies when you print the PDF. | | |
| Download Labels > | | |
| Problems? If you have problems with printing/margins, ensure you are using the exact printer driver for your printer more sourced from the manufacturer of your printer (not just coming with Windows/Mac). Check you have the right paper size selected (A4) and are printing with Chrome/Acrobat. Have a look at your printer paper/labels in the tray and make sure they are straight and properly positioned. Some label sheets are not quite symmetrical check they are being printed the right way up. Try another printer and computer (eg, at home) to compare. Measure the margins in the PDF using Adobe Acrobat measure tool and compare with the printed output. Diswith your internal IT team. | t e | |

- **"1. Choose Chemical"** When you enter the name or formula of the chemical in the box, a list of chemicals will appear. Click the appropriate chemical. If it is a solid, continue to the next step. If it is a solution, another box will appear for you to enter the concentration. The software will automatically choose the correct signal word, pictograms and hazard statements depending on the concentration of the solution entered.
- **"2. Choose Label Size and Options"** You can print four different-sized labels for either pure chemicals or solutions. Click on the appropriate size of label. The various dimension of the labels are provided, as is the Avery code, to make your choice easier.

Click 'Yes' or 'No' depending on whether you would like borders on the labels. Click 'Yes' if you want the border to print on the label. Borders are provided to assist those who like to cut out the labels. Click 'No' if you use Avery or other types of sticky labels in Avery sizes where you do not need the border.

"3. Download and Print Labels" At this stage, you need to print a full sheet of the same label. Labels are downloaded as PDF files for easy printing. You should use Chrome or Adobe Acrobat and print at 100% or 'Actual Size'. Make sure you do not have 'Fit to Page' selected. If you wish to reduce the size of the label and you are using paper, reduce the percentage. For example, 80% will allow you to print labels

for very small dropper bottles. If you want to print multiple pages of labels, enter the number of copies when you print the PDF.

If you have problems with printing/margins, make sure you are using the exact printer driver for your printer model, sourced from the manufacturer of your printer (not just coming with Windows/Mac). Also check that you have selected A4 as your paper size and that you are using Chrome or Adobe Acrobat and that the labels are being printed the right way up. In addition, check the positioning of the paper/labels in the tray and ensure that they are straight and correctly-positioned, as some label sheets are not quite symmetrical. If you are still having problems, try another computer and printer to compare. Measure the margins in the PDF using the measure tool in Adobe Acrobat and compare with the printed output. Contact your internal IT team to discuss your problems.

Ways to Use Student RiskAssess at Your School

Either the student(s), the teacher or the laboratory technician can initiate a risk assessment in Student RiskAssess. Both the teacher and the laboratory technician need to review and electronically sign the risk assessment for it to be automatically archived (in cases when the inherent risk is 'high' or 'extreme' in the classroom, a third signature is required). As each risk assessment has fields for equipment and chemicals for preparation, scheduling details and notes, it also acts as a good communication tool between students, teachers and laboratory technicians. There are several recommended approaches for using Student RiskAssess effectively at your school.

Paper-Based System

You may choose to print each risk assessment and have the teacher and laboratory technician sign it with a pen, and then file it. However, electronic signatures by both the teacher and laboratory technician (and also by an authorised person in certain cases) are required for the risk assessment to be electronically archived (See *Archiving Risk Assessments* in earlier section).

It is up to the school to decide whether student(s) need to also sign the printed version of the risk assessment in the section called "Agreement by student(s)" (See Signing Risk Assessments in earlier section).

Note that using a paper-based workflow still allows you to use the "Laboratory Scheduling" screen to see a day-by-day view of future and past experiments, if the information has been entered into Student RiskAssess.

Electronic Documents Stored on the Student RiskAssess System (Recommended)

Using electronic documents saves time and paper. You can choose to sign the risk assessment electronically by clicking the "**Sign Electronically**" button (See *Signing Risk Assessments* in earlier section).

Both the teacher and the laboratory technician need to electronically sign each risk assessment for the risk assessment to be electronically archived. If the classroom component of the experiment has an inherent risk level of 'high', or 'extreme',

additional approval and electronic signature is required from an 'Authorized person' (see *The Actual Risk Assessment* in earlier section).

Usually, after creating a risk assessment, you would sign your part electronically. You then need to let the other person(s) know about the risk assessment so that they can review and sign it. There are two alternative approaches to do this:

- 1. Risk assessments are automatically included in the "Laboratory Scheduling" screen. Laboratory technicians, who are using the "Laboratory Scheduling" screen, will see the risk assessments there, and can check and sign them (see earlier section on *Laboratory Scheduling* for more information").
- 2. Alternatively, you can send the risk assessment by email to another person for checking and second (or third) electronic signing. For example, if laboratory technicians generally create the risk assessments, they can then email them to the appropriate teacher (or vice versa). The risk assessment can also be emailed to the authorized person, if required. The email includes a link, which when clicked, will retrieve the relevant risk assessment in the Student RiskAssess system, making it quick and easy to sign electronically.

When two electronic signatures (or three, in the cases where the inherent risk in the classroom is 'high' or 'extreme') have been attached to a risk assessment, the risk assessment is automatically archived. See earlier section on *Archiving Risk Assessments*.

If it is school policy that students do not need to physically sign the risk assessment, it is not necessary to print the electronic document. However, we recommend you still store a copy of the risk assessment on your computer as an additional back up (see later section on *Long-term Storage of Risk Assessments*). You can download the risk assessment by clicking the "Save/Print PDF" button, so you can move or copy the file to a subdirectory or folder for storage purposes.

Long-term Storage of Student Risk Assessments

Risk assessments are stored on the RiskAssess system in as secure a manner as we can arrange. RiskAssess operates from a server in Australia, with continuous backup to a server in Singapore. Both servers are backed up by their providers. While we can give no legal guarantee that RiskAssess will preserve your data, we have made the system as secure and long-lived as we can. We will do our utmost to ensure long-term data storage, but we do not warrant that RiskAssess will forever store your records.

We recommend that you save your risk assessments on your own school system, as an additional backup. You should discuss with your IT Department the best method for long-term storage of your risk assessments.

Risk assessments should be backed up and stored according to your school policy. The RiskAssess team recommends that risk assessments be stored for the lifetime of the people involved. The reason for this is that courts of law routinely waive the 7-year Statute of Limitations in the event of chemical injuries such as cancers, which may take decades to become apparent.

Learning Resources

You can access a number of helpful documents and presentations by clicking the "Learning Resources" link, either from the bottom of the Student RiskAssess webpages or on the splash page.

Subscribing to Student RiskAssess

Schools subscribe to Student RiskAssess and are given a password for students and staff to use.

Students should not click the link "Subscribing to RiskAssess" and should not complete the form, unless they are willing to pay the annual subscription fee themselves. Students should use the school's Student RiskAssess password to access Student RiskAssess.

Frequently Asked Questions

In case you are having any problems, you can check out the "Questions and Answers" link from the bottom of every Student RiskAssess webpage. Staff can also click the link "Contact Us" at the bottom of every screen in Student RiskAssess to ask further questions.

Students should ask their teachers about any problems they are experiencing with Student Risk Assess.