

RISK ASSESSMENT DETAILS

RISK ASSESSMENT TITLE

Sodium Hydroxide

RISK ASSESSMENT COMPLETED BY:

Kate Millan – Health & Safety Officer

SUBJECT MATTER EXPERT:

RA NUMBER:

CHEM101

VERSION:

1

VERSION DATE:

25/01/2011

REVIEW DATE:

25/01/2016

IMPORTANT NOTES

Contact lenses may pose a special hazard as soft contact lenses may absorb and contain irritants.

PERSONS AT RISK

Laboratory users of Sodium Hydroxide

REFERENCED DOCUMENTATION: (list any other sources of information that relates to this risk assessment, e.g. SOPs, other Risk Assessments etc)

MBS Chemical Handling & Storage Procedures

MBS Chemical Waste Disposal Procedures

OVERALL RISK RATING

Medium

HAZARD IDENTIFICATION & RISK ASSESSMENT (use the Risk Matrix below to assess the risk)

HAZARD 1:

Chemical

ASSOCIATED RISKS:

Can cause severe burns, severe damage to eyes through skin contact, inhalation and/or ingestion.

Contact lenses may pose a special hazard as soft contact lenses may absorb and contain irritants.

MEASURES REQUIRED TO REDUCE RISK:

1. Keep sodium hydroxide stored separately.
2. Wear appropriate PPE at all times – gloves, lab coat, safety glasses. Gloves must have a protection class of 3 or higher).
3. All processes involving the use of sodium hydroxide must have an up to date Safe Operating Procedure.
4. All users of sodium hydroxide must have completed University Chemical Management Training.
5. School's Chemical Waste Disposal procedures must be followed at all times when disposing of Sodium Hydroxide.
6. Avoid all personal contact, including inhalation.
7. Use in a well ventilated area.
8. Contact lens wearers must wear safety goggles with wrap around side protection.

RESIDUAL RISK (When all control measures have been implemented)

CONSEQUENCE

Major

LIKELIHOOD

Rare

RISK RATING

Medium

HAZARD 2:

Chemical

ASSOCIATED RISKS:

Reacts violently with water generating heat and corrosive fumes, reacts violently with acids.

Ignites on contact with cinnamaldehyde and zinc and reacts explosively with a mixture of chloroform and methane

MEASURES REQUIRED TO REDUCE RISK:

1. Do not store with acids, oxidising or any other incompatible materials.
2. Always add material to water, NEVER water to material.
3. Read the MSDS before using (Chemwatch).

RESIDUAL RISK (When all control measures have been implemented)

CONSEQUENCE

Major

LIKELIHOOD

Rare

RISK RATING

Medium

ADDITIONAL CONTROLS AFTER REVIEW

RISK CONTROL:	
DATE OF REVIEW:	REVIEWED BY:
RISK CONTROL:	
DATE OF REVIEW:	REVIEWED BY:
RISK CONTROL:	
DATE OF REVIEW:	REVIEWED BY:

HAZARD REGISTER

If the residual risk is high or very-high after controls have been implemented, the risk assessment must be signed off by the Head of School and transferred to the Hazard Register.

DATE ENTERED ON HAZARD REGISTER:	HEAD OF SCHOOL SIGNATURE:

RISK MATRIX

		Consequence				
		Negligible	Minor	Moderate	Major	Severe
Likelihood	Almost Certain	M	H	V	V	V
	Likely	M	M	H	V	V
	Slight	L	M	H	H	V
	Unlikely	L	L	M	M	H
	Rare	L	L	L	M	M

Almost Certain	There is an expectation that such an event will occur.	Severe	Injury resulting in death or permanent disability.
Likely	There is an expectation that such an event could occur but not certain to occur.	Major	Injury requires extensive medical treatment, hospitalisation.
Slight	The expectation of this event occurring is between "could" and "improbable".	Moderate	Injury requires formal medical treatment e.g. treatment as an outpatient in a medical facility.
Unlikely	The expectation of this event occurring is doubtful or improbable.	Minor	Injury requires first aid.
Rare	There is no expectation that this event will occur.	Negligible	Injury requires minor first aid or results in short term discomfort e.g. headache, bruise etc.