New Employee Safety Training

Environmental Health and Safety





WHAT WE WILL COVER

- Who/What/Where is EHS
- Hazard Communication & Employee Right to Know

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- Risk Mitigation & Your Role
- Emergency Response/Accidents/Injuries
- Additional Training Opportunities

CONTACT INFORMATION-EHS OFFICE

April Sams, Director she/her Physical Plant Office: 503-777-7788 karra@reed.edu Rachel Willis, Sustainability Coordinator she/her Physical Plant Office: 503-459-4615 willisr@reed.edu

Aaron Haddeland, EHS Specialist

he/his Physical Plant Office: 503-517-7931 ahaddeland@reed.edu



ENVIRONMENTAL HEALTH & SAFETY

- Promote and maintain a safe and healthful educational environment for all faculty, staff, students, and visitors.--Training focus
- Support College's commitment to environmental sustainability.
- Comply with local, state, and federal laws.

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HEALTH AND SAFETY COMMITTEE

- Brings management and workers together to promote health and safety in the workplace.
- Meets once per month.
- Reviews injuries, accidents, and near misses.

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• Conducts inspections each quarter.

REGULATORY OVERSIGHT

- Federal: OSHA, EPA, DOT, NRC, CDC, DEA
- State: Or-OSHA, DEQ, OHA
- Local: Portland Fire Bureau, Portland Water Bureau



REED COLLEGE HAZARD COMMUNICATION/EMPLOYEE RIGHT TO KNOW

- Slip/Trips/Falls
- Back Injuries
- Hazardous materials
- Housekeeping
- PPE
- Ergonomics
- Heat Illness
- Wildfire Smoke



SLIPS, TRIPS, AND FALLS

- Slips, trips, and falls account for over 60% of the reported accidents at Reed College.
- Accidents resulting from slips, trips, or falls can be related to a variety of hazards in the workplace. It is important to identify these hazards and implement mitigation factors to prevent injury.
- Some examples of hazards that can lead to a slip, trip, or fall:
 - Wet surfaces Weather hazards Loose rugs or mats Uneven walking surfaces

Poor lighting Clutter Extension cords Stairs

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BACK INJURIES

- Back injuries are the next highest reported injury.
- Awkward/sustained posture Improper lifting technique is the largest cause of lower back injuries. For example, bending at the waist, or twisting while holding anything greatly increases the stress on the muscles and joints of the back.

• Things to remember while lifting items:

1. Pace yourself. Take many small breaks between lifts if you are lifting a number of things.

2. Do not overdo it – do not try to lift something too heavy for you. If you have to strain to carry the load, it is too heavy.

3. Make sure you have enough room to lift



HAZARDOUS MATERIALS

- Chemical
- Biological
- Radiation
- Lasers/Xrays



CHEMICAL HAZARDS

Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

- Standardizes Safety Data Sheets & labels
- Training requirements: OSHA's Hazard Communication Standard (1910.1200) or OSHA's Laboratory Safety Standard (1910.1450).



CHEMICAL HAZARDS HAZARD COMMUNICATION: PICTOGRAMS

What do you see?



See chemical HAZARDS!

Health Hazard	Flame	Exclamation Mark		
 Carcinogen Mutagenicity Reproductive Toxicity Respiratory Sensitizer Target Organ Toxicity Aspiration Toxicity 	 Hammables Pyrophorics Self-Heating Emits Flammable Gas Self-Reactives Organic Peroxides 	 Irritant (skin and eye) Skin Sensitizer Acute Toxicity Narcotic Effects Respiratory Tract Irritant Hazardous to Ozone Layer (Non-Mandatory) 		
Gas Cylinder	Corrosion	Exploding Bomb		
 Gases Under Pressure 	 Skin Corrosion/Burns Eye Damage Corrosive to Metals 	 Explosives Self-Reactives Organic Peroxides 		
Flame Over Circle	Environment	Skull and Crossbones		
 Oxidizers 	 (Non-Mandatory) • Aquatic Toxicity 	 Acute Toxicity (fatal or toxic) 		

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CHEMICAL HAZARDS HAZARD COMMUNICATION: CONTAINER LABELS

PRODUCT ID	ENTIFIER	
Universal Product	Code	
SIGNAL WO	RD 1	
Hazard statement	(3)	
Precautionary stat	ements & pictograms	
U		
Fill Weight:	Lot Number:	
Gross Weight:	Fill Date:	\mathbf{v}
Expiration Date:		
5		
Company Nam	ne, Street Address, City, St	ate, Zip, Country, Phone Number, Emergency Phone



CHEMICAL HAZARDS HAZARD COMMUNICATION: SDS

- 1. Identification
- 2. Hazard(s) identification
- 3. Composition/information on ingredients
- 4. First-aid measures
- 5. Fire-fighting measures
- 6. Accidental release measures
- 7. Handling and Storage
- 8. Exposure controls/personal protection
- 9. Physical and chemical properties
- 10. Stability and reactivity
- 11. Toxicological information
- 12. Ecological information
- 13. Disposal considerations
- 14. Transport information
- 15. Regulatory information
- 16. Other information

	el		Du	ulux [.]			
1. IDENTIFICATION	OF THE MATER	RIAL AND SUPP	PLIER				
Product Name:	638-LINE BR	638-LINE BRITISH PAINTS CEILING PAINT WHITE					
Recommended Use:	Surface coating. A	Surface coating. Applied by brush, roller or spray.					
Supplier: ABN: Street Address:	Dulux Australia, a 67 000 049 427 1956 Dandenong F Clayton, Victoria Australia	Dulux Australia, a division of DuluxGroup (Australia) Pty Ltd 67 000 049 427 1956 Dandenong Road, Clayton, Victoria					
Telephone Number:	+61 3 9263 5678	+61 3 9263 5678					
Facsimile:	+61 3 9263 5777						
Emergency relephone:	1 800 033 1	11 (ALL HOURS	5)				
2. HAZARDS IDENTI	FICATION						
Not classified as Dangerous Ge Road and Rail; NON-DANGER Poisons Schedule:	OUS BOODS. OUS GOODS. None allocated.	Australian Dangerous	Goods Code (ADG Co	ide) for transport by			
3. COMPOSITION/IN	FORMATION OF		s				
3. COMPOSITION/IN	FORMATION	N INGREDIENT	S	41 200000 App			
3. COMPOSITION/IN Components	FORMATION O	CAS Number	S Proportion	Risk Phrases			
3. COMPOSITION/IN Components Pigments Water	FORMATION O	CAS Number	Proportion 30-60% 30-60%	Risk Phrases			
3. COMPOSITION/IN Components Pigments Water Synthetic polymer(s)	IFORMATION OI	CAS Number 7732-18-5	S Proportion 30-60% 30-60% 30-60%	Risk Phrases - -			
3. COMPOSITION/IN Components Pigments Water Synthetic polymer(s) Ingredients determined not to b	IFORMATION OI	CAS Number 7732-18-5	S Proportion 30-60% 30-60% 30-60% to 100%	Risk Phrases - - - -			
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3. COMPOSITION/IN Components Pigments Water Water Synthetic polymer(s) Ingredients determined not to b 4. FIRST AID MEASI Inhalation: Remove within from area of exp clothing. Allow patient to assur advice if effects persist. Skin Contact: If skin contact occurs, remove (a dvice, or entert) If in eyes, wash out immediated atvice.	IFORMATION OI the hazardous URES osure - avoid becoming a ne most comfortable posi contaminated clothing an y with water. In all cases	N INGREDIENT CAS Number 7732-18-5 casualty. Remove cor tion and keep warm. K d wash skin with runnin s of eye contamination	S Proportion 30-60% 30-60% 10 100% to 100% taminated clothing an eep at rest until fully n ng water. If irritation oc it is a sensible precau	Risk Phrases			
3. COMPOSITION/IN Components Pigments Water Synthetic polymer(s) Ingredients determined not to b 4. FIRST AID MEASI Inhalation: Remove victim from area of exp clothing. Allow patient to assur advice i effects persist. Skin Contact: If skin contact: cocurs, remove (a advice, Eye Contact: If ne yes, wash out immediatel advice. Ingestion: Rinse mouth with water. If swal	IFORMATION OI te hazardous URES OSURE - avoid becoming a ne most comfortable posi contaminated clothing an y with water. In all cases lowed, give a glass of wa	N INGREDIENT CAS Number 7732-18-5	S Proportion 30-60% 30-60% 30-60% to 100% to 100% taminated clothing an eep at rest until fully r ng water. If irritation oc it is a sensible precau cal advice.	Risk Phrases			
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SDS AT REED

https://www.reed.edu/ehs/

REEL	O COLLEGE					MSDSonline		
Safety Co	enter // MSDS Search	n						
	All Products							
All Products	Search by Product Name, M	anufacturer, CAS#, and/or Product Co	de or search by indexed field	s, Ingredient, Ingredient	CAS#, UN/NA#, Dc	- Advanced Search		
Locations	Locations:		Groups:		Product Data:			
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	2 🗋 🔁 🖉 🔞 GHS+	Tungstic acid Manufacturer: Sigma-Aldrich Cor ALDRICH CHEMI	rporation CAL COMPANY	09/14/2017	7783-03-1			
	3 🗋 🔁 🕑 🔞 GHS+	(Diacetoxyiodo)benzene Manufacturer: Sigma-Aldrich Con ALDRICH CHEMI	poration CAL COMPANY	09/22/2017	3240-34-4			



CHEMICAL HAZARDS HAZARD COMMUNICATION: NFPA SYSTEM

- Red Flammability
- Blue Health
- Yellow Reactivity



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• Hazard Rating (0 - 4)

LABELING REQUIREMENTS FOR 2° CONTAINERS

- Full chemical name
- Hazard
- Date
- Contact Information



BIOLOGICAL HAZARDS

Potentially contaminated areas or equipment are labeled with a biohazard sign (i.e. syringe/sharps containers)



All items must be handled with universal precautions with appropriate PPE



RADIOACTIVE MATERIALS



No Principle Users outside of the Reactor.

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LASERS AND X-RAYS





Arthur Glasfeld: glasfeld@reed.edu

Dan Gerrity: gerrity@reed.edu

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HOUSEKEEPING AND PORTLAND FIRE BUREAU

- Work areas must be kept clean and free from obstructions
- Stairways and hallways should not be used for storage
- Extension cords should not be used as a permanent solution (>24hours) and UL rated.
- Access to exists, emergency equipment, control panels, and fire extinguishers must never be blocked
- All chemicals should be stored with the proper label
- Keep combustible items to a minimum and 18 inches from sprinkler heads

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• Limit storage on top shelves. Glass and hazardous materials below eye level

PERSONAL PROTECTIVE EQUIPMENT

- Gloves, eye protection, closed toe shoes, long sleeves, lab coat, goggles, etc.
- PPE determinations are based on a risk assessment
- EHS has determined the majority of tasks at Reed and the proper PPE for these tasks



ERGONOMICS PROGRAM REED.EDU/EHS/ERGONOMICS/

- Request an ergonomic evaluation of your workspace (evaluation request form on our website)
 - This may include recommendations for new equipment
- EHS will help with getting recommended equipment



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OR OSHA HEAT ILLNESS RULE

Actions employers must take when heat index equals or exceeds 80°F

- 1.) access to shade
- 2.) access to drinking water

Actions employers must take when heat index equals or exceeds 90 $^{\circ}\mathrm{F}$

- 1.) access to shade
- 2.) access to drinking water
- 3.) implement communication plan and buddy system
- 4.) monitor for signs of heat illness
- 5.) rest periods in shade every 2 hours
- 6.) modify tasks



OR OSHA WILDFIRE SMOKE RULE

Symptoms of Wildfire Smoke Exposure

- Eyes-burning, redness, tearing, irritation, inflammation
- Respiratory system-runny nose, sore throat, cough, difficulty breathing, sinus irritation, wheezing, shortness of breath
- Fatigue, headache, irregular heartbeat, chest pain

Exposure control measures

• As directed by the ERT, Reed College will modify operations when AQI reaches unhealthy levels. Individuals working outside or inside without mechanical air will have access to N95 respirators. If you have reason to believe you will need to provide essential services during a wildfire event, please contact EHS to arrange for N95 use.



Monitoring AQI and Heat Index



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RISK MITIGATION AND YOUR ROLE

- Report hazards, injuries, and near misses
- Know and follow all safety procedures that apply to your work
- Stop work if you feel it is unsafe
- Suggest ideas for safety improvements
- ASK questions



EMERGENCY RESPONSE KEY TAKEAWAYS

- Locate
 - Two exits routes
 - Evac meeting point
 - Extinguisher
 - Eyewash and shower
 - AED
- Get out, stay out, stay alive



EVACUATION

IN THE EVENT OF A FIRE Choose closest exit from building

Walk Calmly and Quickly from the building. Do Not Run

Student Center

Upper and lower flors (NOT FOR POSTING)

- Primary and secondary evacuation routes are established and indicated on evacuation maps as well as AEDs, pull stations, and fire extinguishers throughout campus.
- Exits are clearly marked and all signs lit and unobstructed.



BUILDING EVACUATIONS Evacuation will occar when an alarm sounds and/or upon notifiction by Community Safety (503-788-6666; x6666). · When the alarm sounds or you are otherwise directed to evacuate, leave by the nearest exit.

- · The last person out of the room must shut the door.
- · In case of a fir, this greatly limits the spread of smoke and · Do Not use elevators in case of earthquake or fir.
- · Assist the handicapped in exiting the building.
- · Once outside, move At Least 300 Feet from the building
- Assemble at a predetermined meeting spot, if possible.
- Avoid blocking sidewalks, hydrants, streets and in Tanes
- · Emergency Vehicles must have clear access. · Do not reenter the building unless told to by Community Safety

Assembly Point Lawp north of Eliot



EMERGENCY ASSEMBLY POINTS



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EMERGENCY RESPONSE IN CASE OF FIRE

1.) Leave the immediate area, closing all doors behind you.

2.) Sound alarm by pulling handle on fire alarm.

3.) Call Community Safety(503-788-6666/6666) or 911

4.) Use a fire extinguisher only if you have been trained and the fire is easily controlled. Always pull the fire alarm beforehand.

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EMERGENCY RESPONSE IN CASE OF INJURY

1.) Remove victim from immediate cause of injury, if safe to do so. Call Community Safety (6666). CS is trained in first aid techniques

2.) If chemicals/hazardous substances are on skin or in eyes, flush affected area for at least 15 mins either with the shower, eyewash, or sink. If possible, remove clothing or chemically soaked item/s.

3.) Refer to the <u>BBP Exposure Control Plan</u> if blood or bodily fluids are present for Universal Precautions: assume all blood and bodily fluids are infectious

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INCIDENT & ACCIDENT REPORTING

- REPORT ALL INJURIES and NEAR MISSES TO YOUR SUPERVISOR ON THE SAME DAY. Report your injury or illness to human resources immediately, either by calling Cypress Williams or sending an email to <u>hr@reed.edu</u>. Fill out accident/incident report form and 801 (if applicable) within 3 day.
- HELP WITH ANALYSIS TO FIX SYSTEM.





ADDITIONAL TRAINING OPPORTUNITIES

- Fire Extinguisher
- Blood-borne Pathogens
- Asbestos Awareness
- Hearing Conservation
- Ergonomics
- PPE
- CPR/First Aid
- Laboratory Safety
 www.reed.edu/ehs



QUESTIONS?

