Hexavalent Chromium - Leader Guide



1 Course Details

1.1 Training Times and Use of Course

- Video Length 21 Minutes
- Estimated time to complete written test 13 Minutes
- Total estimated training time 34 Minutes

1.2 Learning Objectives

When trainees have completed this course and the associated test, they should have a clear understanding of the following:

- What chromium and hexavalent chromium are
- How hexavalent chromium is used in industry
- The connection between welding and hexavalent chromium
- Methods of exposure to hexavalent chromium
- Health effects of exposure
- OSHA regulatory standards for hexavalent chromium
- Respiratory protection and other PPE
- Safe work practices and welding considerations

1.3 Topics Covered

The following topics are covered in the accompanying video for this course:

- Chromium
 - o Exposure
 - Health hazards
- Welding operations
- Increased exposure from welding processes
- Considerations for controlling welding fumes.
- Applicable standards
 - o OSHA exposure levels
 - o Initial exposure assessment and continued monitoring
 - Observation and recording of monitoring
 - Employee notification
- Regulated areas
- Engineering and work practice controls
- Sample controls for painting and welding
- Respiratory protection, additional PPE, removing and storing PPE
- Washing and hygiene, housekeeping
- Medical surveillance, Information to PHLCP
- Written medical opinion
- Medical records and training

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1.4 Regulatory Standards or Industry Practices

This course is based on the following regulations or industry best practices:

- 29 CFR 1910.1026: Chromium VI (General Industry)
- 29 CFR 1926.1126: Chromium VI (Construction)

1.5 Handouts / Printed Materials

Be sure to download and print the tests, answer guide, and completion certificates associated with this course at http://www.buybettertraining.com/documents.

Additional suggestions for print material may be found in the "Additional Resources and Links" section of this leader guide.

2 Discussion / Exercise Guide

The following questions, exercises, or discussion topics may be useful for instructor-led training events:

- Discuss prevention and monitoring methods used on site
- Review company policy regarding risk management
- Discuss process for reporting symptoms or illness related to exposure
- Have examples of required PPE on hand

3 Additional Resources and Links

The following publications, organizations, or Internet links may be useful for further development of training material for your training:

- U.S. Department of Labor's Occupational Safety & Health Administration (OSHA) www.osha.gov
 - o OSHA Safety and Health Topics https://www.osha.gov/SLTC/hexavalentchromium/index.html
 - o OSHA Fact Sheet https://www.osha.gov/OshDoc/data_General_Facts/hexavalent_chromium.pdf
- National Institute for Occupational Safety and Health (NIOSH) www.cdc.gov/niosh/
 - o NIOSH Workplace Safety & Health Topics http://www.cdc.gov/niosh/topics/hexchrom/

4 Effective Training Tips

Planning Your Session - Be Prepared!

- Schedule more time than you may think you need, allowing for breaks if your training will be longer than an hour.
- Make a checklist of items and training materials needed. And be sure to have enough material for all your trainees.
 - Handouts and tests
 - o Extra pens/pencils for trainees
 - o Dry-erase markers/chalk (Often the ones left in the training room don't work.)
 - Additional visuals and demonstration samples
- Create a general checklist of things to do prior to your training session.
 - o Schedule the training (notifying attendees and reserving the training room).
 - o Create an agenda with times for each section.
 - o Familiarize yourself with all the training material you plan to use, including this course
 - o Develop any additional visuals (flip charts / slide shows) in advance with time to review and refine them.
 - o Practice your presentation, including how you'll conduct learning exercises and demonstrations.
 - Consider how you'll follow up with trainees regarding test results and other relevant information after your session.
- Have all handouts and hard copies of training material printed in sufficient amounts prior to your training session. Some instruction professionals suggest only distributing handouts when they're needed during the session rather than allowing trainees to be distracted by reading through material left out for them prior to the session.
 - If you'll be training at a location away from your office, it may help to have electronic copies of all your printable training materials
- Get to the training location early to make sure all technology (projectors, computers, AV equipment) and lighting
 is functioning properly.
 - o If you have multiple visuals and handouts, organize them beforehand, making them accessible during the training to avoid unnecessary distractions.
- Situate trainee seating appropriately for the type of training you'll be doing. Prepare extra space for any demonstrations or interactive exercise you may have planned.

Common Courtesy

- Ask trainees to silence cell phones and other media devices. If accepting calls may be necessary due to a person's
 work or personal situation, ask that calls be discretely taken outside of the training area.
- Ask trainees to refrain from emailing and texting during the session.

Training Techniques

- Be aware of some of the common training techniques that may work well for the type of training you'll be doing.
 - o See one, do one, teach one.
 - o Tell them what you're going to tell them. Tell them. Tell them what you told them.
- Familiarize yourself with adult learner characteristics and techniques that accommodate them. Adult trainees tend to be:
 - o Problem-centered
 - Results-oriented
 - Self-directed
 - Skeptical
 - o More interested and engaged in topics directly related to their work or personal needs
 - Accepting of learning task responsibilities

Interacting With Trainees

- Ask "Why" and "How" questions that allow trainees to think about their responses and offer something unique to the exchange.
- Direct questions to trainees in a way that helps them focus on and retain the topics covered without making them feel stumped or embarrassed.
- Incorporate demonstrations, exercises, or discussions that include and engage trainees. If possible, make them
 positive, encouraging experiences such as good-natured games. Avoid games or activities that may be too
 competitive or shut down input or attentiveness of others.
- Consider allowing trainees to ask questions as they arise. This may take extra time during a session, but it offers
 trainees an opportunity to engage when they're curious rather than allowing them to get distracted by an
 unanswered question.

Wrapping Up Your Session

- Summarize the key topics and learning objectives from your training.
- Thank your trainees for attending your session when you're done. That can go a long way.
- Ask for constructive feedback from trainees that may improve your next session.
- Provide your contact information and follow up with trainees as needed.