



# CHROMIUM-VI

June 2021

---

**HSEQ Direct** is a digital communication, registration and training platform with a focus on Health, Safety, the Environment and Quality.  
**Designed specifically for the workplace!**

---





# WHAT IS IT? (1/2)

**Chromium-VI is a known carcinogen. It is the oxidized state of the element Chromium. The oxidized state is of principal concern in occupational safety and health and the environment because of its extreme toxicity and designation as a human carcinogen.**



# WHAT IS IT? (2/2)

It is usually produced by an industrial process. Chromium-VI compounds may be used as pigments in dyes, paints, inks, and plastics. It also may be used as an anticorrosive agent added to paints, primers, and other surface coatings. The Chromium-VI compound chromic acid is used to electroplate Chromium onto metal parts to provide a decorative or protective coating.

**Chromium-VI can be released into the air.** For example during stainless steel welding (in the welding fumes). It can also occur in gas turbines, for example, in places where galvanized (Chrome) pastes have been added, and where heating causes yellow Chromium-VI deposits to form.



# HAZARDS

**Chromium-VI is particularly hazardous when it appears in the form of dust particles suspended in the air.** These particles can come into contact, or enter, your body through your lungs, through sweat on your skin, or through your mouth. This can be harmful to your health. For example, it can lead to work-related asthma, eye, skin and respiratory tract irritation, liver and kidney damage, lung diseases, and respiratory tract cancer.

**Please note:** the symptoms mentioned are general and may vary according to exposure in specific work situations and per person. When in doubt, always consult a Health and Safety expert or an occupational physician.



# PREVENTION

Make sure there is effective ventilation in the workplace and that the presence of Chromium-VI is under control before you start working.

**If the presence, or absence, of Chromium-VI cannot be determined, stop working immediately and inform your manager.**



# PROTECTION (1/2)

When welding, sanding, cutting, burning, blasting or cleaning materials suspected (or confirmed) of having Chromium-VI, the work area must be cordoned off.

- always use the correct (extra) Personal Protective Equipment, depending on the type of activity; ask your company about this
- remove all dust from your clothing on leaving the abrasive blasting and workplace



# PROTECTION (2/2)

- wipe your Personal Protective Equipment with a damp cloth before you take it off
- wash your hands and face thoroughly before every coffee, smoking and/or lunch break, when work has finished, and before and after using the toilet
- after work, turn your disposable work clothes inside-out, wrap them in plastic, and dispose of them



# IN CASE OF...

Any incident that occurs during work can have severe impact on people, installations and the environment. **Make sure that you are familiar with the right procedure in case incidents happen.** If not, ask your company for further information.

**Unsafe working conditions should never be ignored and should always be kept in mind to avoid hazards.**



# IMPORTANT INFORMATION

- 1** Only start to work once you are **certain about the presence**, or absence, of Chromium-VI.
- 2** Make sure there is **effective ventilation**.
- 3** **Avoid the spreading of dust** and avoid blast-cleaning abrasives as much as possible. Tidy up the work area daily.
- 4** **Clean your tools properly**, and **do not take** your PPE and work clothes to clean areas.
- 5** **Use the PPE correctly**. Dispose of contaminated PPE and clothing.

---

## QUESTIONS? MORE INFORMATION? UNSAFE WORKING CONDITIONS?

Your HSE Manager is there to help answer any questions and ensure a safe working environment for all.

---

# QUESTION 1

## Where may Chromium-VI occur?

.....

A. At workplaces, as an anticorrosive agent in coatings and paints.

.....

B. On the tools that we use.

.....

C. In water that remains after cleaning the workplace.

.....



# ANSWER 1

Where may Chromium-VI occur?

**A. At workplaces, as an anticorrosive agent in coatings and paints.**

B. On the tools that we use.

C. In water that remains after cleaning the workplace.

## QUESTION 2

**When is Chromium-VI hazardous to your health?**

.....

A. When released into the air as particles.

.....

B. When it enters your digestive system.

.....

C. Almost never.

.....



## ANSWER 2

When is Chromium-VI hazardous to your health?

---

**A. When released into the air as particles.**

---

B. When it enters your digestive system.

---

C. Almost never.

---



## QUESTION 3

**If the presence of Chromium-VI cannot be determined, you must:**

.....

A. Check for the presence of Chromium-VI by using a mobile test.

.....

B. Take the necessary precautions and proceed with the work.

.....

C. Put the work on hold and first inform your manager.

.....



## ANSWER 3

**If the presence of Chromium-VI cannot be determined, you must:**

.....

A. Check for the presence of Chromium-VI by using a mobile test.

.....

B. Take the necessary precautions and proceed with the work.

.....

**C. Put the work on hold and first inform your manager.**

.....





## QUESTION 4

**If the presence of Chromium-VI is suspected (or has been determined), you must do the following before you start working:**

.....

A. Cordon off the area.

.....

B. Make an additional note in the Permit to Work.

.....

C. Proceed with the work and inform your manager later.

.....

# ANSWER 4

If the presence of Chromium-VI is suspected (or has been determined), you must do the following before you start working:

A. Cordon off the area.

B. Make an additional note in the Permit to Work.

C. Proceed with the work and inform your manager later.

## QUESTION 5

**Which one of the following statements is NOT CORRECT when it comes to personal hygiene measures?**

.....

A. Remove dust from your clothing in the blasting/working area.

.....

B. You may not take your work clothes or PPE with you into a car and/or into a break room.

.....

C. After finishing your work, you must wash your disposable overalls.

.....



## ANSWER 5

Which one of the following statements is **NOT CORRECT** when it comes to personal hygiene measures?

.....

A. Remove dust from your clothing in the blasting/working area.

.....

B. You may not take your work clothes or PPE with you into a car and/or into a break room.

.....

**C. After finishing your work, you must wash your disposable overalls.**

.....

