

Occupational Health and Safety Bulletin



Alert: Lead May be Present in Industrial Pigments and Coatings

Lead is an ingredient commonly added to industrial coatings to improve wear, and can be present in pigments used in coating materials. Sampling of coated products such as structural metal, tanks, and piping completed by Jobs, Skills, Training and Labour in 2013 indicated that coatings applied since 2010 may contain over 90 milligrams per kilogram (mg/kg) of lead. Workers may be exposed to lead if the coating is disturbed by activities that create a fine dust or fume such as grinding, sanding, scraping, abrasive blasting, cutting, or welding. There are many industries in Alberta, including metal fabrication and construction where these activities take place. Exposure to lead can occur through inhalation of airborne fumes and dusts. The airborne dusts may also settle on nearby surfaces. Exposure to lead may occur through ingestion as a result of lead-contaminated hands, food, drinks, cosmetics, tobacco products, and clothing.

Legislation under Alberta's Occupational Health and Safety Code has general and specific requirements related to lead. Occupational exposure limits (OELs) are provided for airborne lead compounds. These limits apply to workers directly or indirectly involved with tasks using lead. The specific requirements of the Code are as follows:

- if a worker may be exposed to lead at the work site an employer must identify the health hazards associated with the exposure and assess the workers exposure;
- procedures must be established to minimize worker exposure to lead and workers must be trained in these procedures;
- suitable showers, change rooms or other facilities must be provided to allow workers to remove contamination before leaving the work site. Only articles and clothing that have been properly decontaminated or cleaned can be taken from the work site by workers;
- no worker may eat, drink or smoke in an area of the workplace contaminated with lead;
- the employer must ensure that release of airborne dust containing lead is kept as low as reasonably practicable and prevent unnecessary accumulations of lead (such as the build-up of lead dust) at the work site;
- a lead exposure control plan must be developed if workers may be exposed to lead;
- regular air and surface testing are required to ensure the controls in place are effective;
- medical monitoring (blood lead testing) must be made available to workers exposed to lead;

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- the employer must pay the cost of a blood lead level test;
- a “Code of Practice” must be developed if there is more than a small amount (10 kg) of lead at the work site; and
- personal protective equipment must be properly selected, used and maintained.

For more information:

Lead at the Work Site <http://work.alberta.ca/documents/OHS-Bulletin-CH071.pdf>

Alberta OHS Legislation and Explanation Guide Section 41, 42, 43
<http://work.alberta.ca/occupational-health-safety/307.html>


Surface Coating Materials Regulation
<http://laws-lois.justice.gc.ca/eng/regulations/SOR-2005-109/index.html>

Canadian Centre for Occupational Health and Safety, OHS Answers
http://www.ccohs.ca/oshanswers/chemicals/chem_profiles/lead.html

Contact us:

Province-Wide Contact Centre

-  Edmonton
780-415-8690
-  Other locations
1-866-415-8690
(Toll Free)

-  Deaf or hearing impaired
 - Edmonton 780-427-9999
 - Other locations 1-800-232-7215
(Toll Free)

Web Site

-  www.work.alberta.ca

Getting copies of *OHS Act*, Regulation & Code:

Queen's Printer

-  www.qp.alberta.ca

Occupational Health and Safety

-  <http://work.alberta.ca/occupational-health-safety/295.html>

-  Edmonton 780-427-4952

Call any Government of Alberta office toll-free
Dial 310-0000, then the area code and telephone number you want to reach

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