

Liaison



Connecting with our clients

on topic

▶ Titanium Dioxide Classified as Possibly Carcinogenic to Humans

Titanium dioxide has recently been classified by the International Agency for Research on Cancer (IARC) as an IARC Group 2B carcinogen "possibly carcinogen to humans". Titanium dioxide accounts for 70% of the total production volume of pigments worldwide. It is widely used to provide whiteness and opacity to products such as paints, plastics, papers, inks, foods, and toothpastes. It is also used in cosmetic and skin care products, and it is present in almost every sunblock, where it helps protect the skin from ultraviolet light.

With such widespread use of titanium dioxide, it is important to understand that the IARC conclusions are based on very specific evidence. This evidence showed that high concentrations of pigment-grade (powdered) and ultrafine titanium dioxide dust caused respiratory tract cancer in rats exposed by inhalation and intratracheal instillation*. The series of biological events or steps that produce the rat lung cancers (e.g. particle deposition, impaired lung clearance, cell injury, fibrosis, mutations and ultimately cancer) have also been seen in people working in dusty environments. Therefore, the observations of cancer in animals were considered, by IARC, as relevant to people doing jobs with exposures to titanium dioxide dust. For example, titanium dioxide production workers may be exposed to high dust concentrations during packing, milling, site cleaning and maintenance, if there are insufficient dust control measures in place. However, it should be noted that the human studies conducted so far do not suggest an association between occupational exposure to titanium dioxide and an increased risk for cancer.

The Workplace Hazardous Materials Information System (WHMIS) is Canada's hazard communication standard. The WHMIS Controlled Products Regulations require that chemicals, listed in Group 1 or Group 2 in the IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, be classified under WHMIS Class D2A (carcinogenic). The classification decision on titanium dioxide has been published on the IARC website and in a summary article published in *The Lancet*.

Representatives from Health Canada (National Office of WHMIS) recently consulted with the Quebec CSST and CCOHS (the two main agencies providing WHMIS classifications to the public) regarding the implications of the IARC decision to the WHMIS classification of titanium dioxide. It was agreed that titanium dioxide DOES now meet the criteria for WHMIS D2A (carcinogen) based on the information released by IARC to date, and that it is not necessary to wait for release of the full monograph.

Manufacturers and suppliers of titanium dioxide are advised to review and update their material safety data sheets and product labels based on this new information as soon as possible. Employers should review their occupational hygiene programs to ensure that exposure to titanium dioxide dust is eliminated or reduced to the minimum possible. Workers should be educated concerning this potential newly recognized risk to their health and trained in proper work procedures.

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- ▶ Marked Records Feature Enhanced



International Agency for Research on Cancer (IARC): Titanium dioxide (IARC Group 2B), Summary of reported data, Feb. 2006
<http://monographs.iarc.fr/ENG/Meetings/93-titaniumdioxide.pdf>

Health Canada: Hazard-specific issues—substances assessed for carcinogenicity
http://www.hc-sc.gc.ca/ewh-semt/occup-travail/whmis-simdut/compli-conform/carcinogenesis-carcinogenese_e.html

Baan, R., et al. Carcinogenicity of carbon black, titanium dioxide, and talc. *The Lancet*. Vol. 7 (Apr. 2006). P. 295-296

Visit the CCOHS website to learn more about CHEMINFO (produced by CCOHS' occupational health and safety specialists). This resource provides comprehensive, practical occupational health and safety information on more than 1,300 important workplace chemicals.

* Intratracheal administration is an exposure procedure that introduces the material directly into the lungs via the trachea, bypassing protective mechanisms in the respiratory system.



▶ Lockout Danger With Latest e-Course from CCOHS

Lockout, the latest e-course from CCOHS, teaches the basics of why lockout procedures are a limb and life-saving safety measure and how to implement those procedures in your workplace.

Lockout is an essential safety procedure that prevents equipment, machines and processes from harming workers. The people who are responsible for maintaining, repairing, cleaning and replacing parts on machinery that is not "locked out" can be seriously injured. Every year in Canada, someone loses a limb or their life because there was no lockout system in place.

The latest e-course from CCOHS provides a basic overview of lockout. It teaches participants how to recognize hazardous situations and know when lockout is required to control electrical or other energized hazards. In an easy, user-friendly format, it illustrates the concepts of lockout, with case studies and other examples of real workplace situations. Sample forms, checklists and quizzes throughout the course make it practical and interactive. There's even an exam at the end of the course to measure learning.

Managers, supervisors, workers, facility managers, health and safety committee members, and anyone who needs to know



more about controlling hazardous energy in the workplace will benefit from the Lockout e-course. Average time to complete this course is about 50-60 minutes.

Learners can ask a CCOHS instructor specific questions that may not have been answered by the course. The e-course has quizzes throughout and an exam to measure learning. Learners are issued a certificate of completion after they pass the exam.

Courses from CCOHS are unique in that they are available in English and French, include voiceovers, case studies, checklists as well as quizzes and final exams to measure learning progress. To ensure the courses remain unbiased they are reviewed externally by representatives of labour, employers and government.

Courses can be purchased for one user or, if four or more people need to be trained, a multi-user license can save money.

Visit the CCOHS website at www.ccohs.ca/products/courses/lockout/ for pricing and registration details.

Several new courses are in the works and are scheduled for release later this summer/fall. New titles include:

- WHMIS: *Understanding MSDSs*
- Return to Work
- Confined Spaces: The Basics
- Confined Spaces Management



Images like the ones above are used throughout our e-courses to enhance the text and aid in information retention.

ccohs e-courses

Looking for Health and Safety Training? CCOHS offers a wide range of courses to meet your needs, including:

- Accident Investigation
- Electrical Hazards
- Health & Safety Committees
- Health & Safety for Managers and Supervisors in the Canadian Federal Jurisdiction
- Health & Safety Training for Managers and Supervisors
- Ladder Safety
- Lockout **NEW!**
- Office Ergonomics
- Office Health & Safety
- Personal Protective Equipment: The Basics
- Preventing Falls From Slips and Trips
- Violence in the Workplace: Awareness **FREE**
- Violence in the Workplace: Recognize the Risk and Take Action
- Violence in the Workplace: Establishing a Prevention Program
- WHMIS for Managers and Supervisors
- WHMIS for Workers

Find details at www.ccohs.ca/education/

Publications Help You Understand MSDSs



A material safety data sheet (MSDS) provides basic information on a material or chemical product including the properties and potential hazards of the material, how to use it safely, and what to do in an emergency. CCOHS has prepared several MSDS publications to help you understand, interpret and properly apply this type of information, and made them available free on the web in html format.

They are also available as print or downloadable PDF collections – Canadian, International and a Combined Canadian/International Collection – choose the one that best suits your purpose.

These publications were prepared by CCOHS as a guide for non-technical users of MSDSs and for anyone with an interest in understanding MSDSs, including:

- Managers and Supervisors responsible for WHMIS compliance
- Workers who have taken a WHMIS course and would like a handy reference for explanations and more detailed information
- WHMIS instructors who may use these publications as resources and handouts
- Health and safety committee members who must evaluate and approve chemical safety plans

Representatives from government, employers, and labour review each publication produced by CCOHS for technical accuracy, readability and to ensure the information is unbiased.

PLUS The *MSDS - A Practical Guide to First Aid* publication is available separately in print or as a downloadable PDF for \$15.

MSDS Publication Collections

	Canadian	International	Combo
Understanding a Material Safety Data Sheet (MSDS)	\$30	\$30	\$45
MSDS – An Explanation of Common Terms	✓	✓	✓
The MSDS: A Basic Guide for Users – Canadian WHMIS Version	✓		✓
The MSDS: A Basic Guide for Users – International Version		✓	✓
The MSDS (International Format): A Brief Summary of Canadian Requirements		✓	✓
The MSDS – A Practical Guide to First Aid	✓	✓	✓

*plus shipping and handling
All products shipped outside Canada are payable in US funds only.

To order print or downloadable PDF bundles visit SHOP@CCOHS (by clicking the SHOP tab in the main navigation bar on the CCOHS website), or contact Client Services.

CCOHS Announces Recipients of Dick Martin Scholarship Award

CCOHS announced the three winners of this year's Dick Martin Scholarship Award during Safety and Health Week. CCOHS makes this annual, national award available to post-secondary students enrolled in occupational health and safety programmes in Canada, to foster interest in the field of workplace health and safety.

For 2005, CCOHS awarded a \$1000 scholarship to **Nicole Dierker**, Grande Prairie, Alberta, **Hind Sbihi**, Vancouver, BC, and **Nicolle McKenna**, Calgary, Alberta. Each of the recipients shares a common interest in making a difference that will help prevent workplace injuries and illnesses and help people be healthy and safe at work.

Nicole Dierker hails from Grande Prairie, Alberta. She recently completed her Occupational Health & Safety Certificate at the University of Alberta. Currently on maternity leave due to the recent birth of her second child, Nicole is employed by an oilfield trucking and rentals company. She also runs a small company that offers first aid courses and safety program development, and occupational health and safety training. Nicole would like to achieve her Canadian Registered Safety Professional (CRSP) designation and hopes to instil the importance of health and safety in her children, as they grow older to become our future workforce.

continued on p.4 ►



If you're a CD-ROM subscriber, why not consider switching to web access. The advantages are many, including:

- no quarterly re-installation
- access anytime, anywhere
- more frequent updates

Make the switch today by contacting Client Services!

► Dick Martin Scholarship...

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Hind Sbihi, a young mother of 2 boys living in Vancouver, calls Morocco home. She completed her engineering studies in Montreal, graduating in 2000 in Industrial Engineering from Ecole Polytechnique. She went on to complete a Masters in Paris, France, and worked in management consulting where most of her work focused on collective insurance companies. When she moved back to Canada, she found out about the School of Occupational and Environmental Hygiene at UBC, and felt it was a natural progression – given her genuine interest and work experience – to apply for the Masters program. She has just completed her first year and is hoping to focus on her thesis work, which examines the issue of noise and cardiovascular disease.

Nicolle McKenna is originally from Victoria, B.C. but has called Calgary home for the last four years. After graduating from high school, she worked at various jobs, most of which would be considered non-traditional. Currently Nicolle works as a safety coordinator in the manufacturing industry and is enrolled in the University of Alberta's Occupational Health and Safety Certification program. Now, halfway through the program, Nicolle intends to complete her certification and gain her designation as a Canadian Registered Safety Professional (CRSP).

In the spring of 2002, CCOHS' Council of Governors established an occupational health and safety scholarship fund in the memory of Dick Martin, a tireless pioneer of workplace health and safety in Canada. As part of the evaluation criteria for the award, applicants submitted essays related to their aspirations in occupational health and safety and were judged on their knowledge of the subject matter, understanding the principles and values of Dick Martin, and understanding the role of CCOHS.

More information on the Dick Martin Scholarship Award and this year's recipients can be found on the CCOHS website www.ccohs.ca/scholarship/entries/

► MSDS Database on the Grow!

Since December, 19,066 records were added to the CD/DVD version of the MSDS service for a total of 224,400. The French language version of the service FTSS, added 8,586 records, totaling 85,292. However, even with this phenomenal growth, the web version of the service is still the way to go, offering more than 285,000 English MSDSs and 115,372 FTSS as of the end of June!

► Marked Records Feature Enhanced

An enhancement has been made to the Marked Records feature for users of the OSHLINE® with NIOSHTIC® and OSH Researcher discs. With the 2006-2 disc release you are now able to mark a much larger number of records for printing/saving. This is particularly useful when sifting through comprehensive searches with a large number of records.

! It is advisable to empty your browser cache before installing each release of the disc information service.

you asked

Q. What is a bibliographic database?

A. Bibliographic databases list references and sometimes summaries of reports, journal articles, publications, on a particular topic. Sometimes the topic is a chemical. For example, a search on the subject of gasoline might provide a number of database records which reference printed sources on gasoline or topics related to gasoline (e.g. hazards of underground gasoline storage tanks, gasoline accident reports, incidents of gasoline poisoning).

For more answers to frequently asked questions visit www.ccohs.ca/products/faqs.html.

course dates

The following new dates and locations have been added to our course calendar:

Health & Safety for Managers and Supervisors in the Canadian Federal Jurisdiction

Calgary, AB
Dec 7, 2006

Edmonton, AB
Nov 30, 2006

Hamilton, ON
Dec 11, 2006

Ottawa, ON
Sept 25, 2006
Mar 12, 2007

Vancouver, BC
Oct 27, 2006

Winnipeg, MB
Nov 28, 2006

Health & Safety Training for Managers and Supervisors

Calgary, AB
Sept 20-21, 2006

Hamilton, ON
Sept 11-12, 2006
Dec 4-5, 2006
Mar 5-6, 2007

Vancouver, BC
Oct 24-25, 2006

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