

Inert Gas Safety

May 2019

Inert (noble) gases are odourless and colourless gases that do not burn or explode and contain very low chemical reactivity under normal conditions. These six noble, naturally-occurring, gases — Helium, Neon, Argon, Krypton, Xenon, and Radon — can; however, displace enough air to reduce oxygen levels and cause injury or death if present in sufficiently high concentrations. Low oxygen levels are particularly problematic in poorly-ventilated, confined spaces. Oxygen levels that are low enough can also cause a loss of consciousness and death due to asphyxiation.

ARGON AND NEON GAS

In the construction industry, Argon and Neon are used and encountered regularly. *Argon* acts as a shielding gas in welding because it does not react with other gases and metals that are present. It can also be used as an insulator in the manufacturing of metals since it displaces unwanted gases, such as carbon monoxide, and prevents rusting (oxidation). *Neon* is commonly used for lighting, signs, high-voltage indicators, lightning arresters (devices used in electric power systems), gas lasers, and refrigeration. Both Argon and Neon gases share the following Safety Data Sheet (SDS) information:

HAZARDOUS PRODUCTS IDENTIFICATION



Hazardous products labelled with the pictogram on the left—contains a symbol of a gas cylinder—indicates that hazardous products with this pictogram are gases that are contained in a receptacle under pressure, or

which are liquefied or liquefied and refrigerated. The hazards presented by these products are related to high pressure or cold temperatures. Hazardous products with this pictogram can be worked with safely if proper storage and handling practices are followed. For more information on this and other pictograms, please visit **www.ccohs.ca**

HAZARD IDENTIFICATION

- Simple asphyxiant; compressed gas
- Contains gas under pressure; may explode if heated; may displace oxygen and cause rapid suffocation
- Asphyxiant in high concentrations

FIRST-AID MEASURES

- ★ After inhalation: remove victim to uncontaminated area wearing self contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped
- * After skin contact: Adverse effects not expected from this product.
- After eye contact: Immediately flush eyes thoroughly with water for at least 15 minutes. Hold the eyelids open and away from the eyeballs to ensure that all surfaces are flushed thoroughly. Contact an ophthalmologist immediately. Get immediate medical attention.
- ★ After ingestion: Ingestion is not considered a potential route of exposure.

INDIVIDUAL PROTECTION MEASURES

- Wear safety glasses, a face shield, and working gloves when handling gas containers.
- ★ Refer to individual SDSs for specific eye protection and respiratory protection measures.
- ★ Ensure equipment is selected based on provincial regulations, and based on the current CSA standard standards.
- ★ Ensure workers are trained on any products in use on the worksite, the hazards associated with them, and the emergency response measures to be taken in the event of an incident.

Visit www.scsaonline.ca/courses to register for the Confined Space and Respiratory Protection Awareness Training classroom course for more in-depth knowledge on this topic.











How To Use This Resource

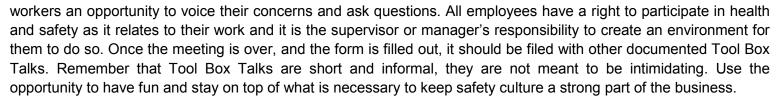
When accidents and incidents happen on the jobsite, we are always quick to point the finger at lack of training, not following practices or procedures, or even improper supervision. The idea that the hazards and dangers associated with the job were not properly communicated to all of the workers is often missed.

Tool Box Talks can go by many names, and although formats may vary, these meetings all serve one purpose: to inform employees and contract workers. Tool Box Talks are short, informal, meetings between management and the

workers on a jobsite. The goal of these meetings is to reinforce current safe job procedures, inform workers of new and/or relevant procedures, review recent safety violations/incidents, and ensure workers are up-to-date on the information required to complete their work safely.

Always use a Tool Box Talk form to record the meeting topic, date, who was in attendance, and any follow-up actions to be taken. Not only do these forms help with consistency of record keeping, but they also ensure that nothing is missed. At the end of the meeting have management sign off on the form.

One of the most important aspects of a Tool Box Talk is giving



For a full listing of Tool Box Talk topics, visit: www.scsaonline.ca/resources/tool-box-talks

For a copy of the Tool Box Talk form, visit: www.scsaonline.ca/pdf/Tool_Box_Meeting.pdf

ABOUT THE SASKATCHEWAN CONSTRUCTION SAFETY ASSOCIATION

The Saskatchewan Construction Safety Association (SCSA) is an industry-funded, membership-based, non-profit organization that provides cost-effective, accessible safety training and advice to employers and employees in the construction industry throughout the province to reduce the human and financial losses associated with injuries. Registered March 20, 1995, the SCSA is, and has been since inception, committed to injury prevention. Serving almost 10,000 member companies with business offices in both Regina and Saskatoon, the major business units of the association are Advisory Services, Business Development, Corporate Services, Program Services and Training. The mission of the SCSA is constructing safety leadership in Saskatchewan and the vision is to create the safest construction environment in Canada.









