



WHMIS

Quick Facts

Workplace Hazardous Materials Information System



Oxidizing Materials

Common oxidizing materials are: ozone, nitrogen dioxide, nitric acid, perchloric acid and peroxides

Oxidizing materials are chemicals that can decompose readily to yield oxygen or an oxidizing substance.

Hazards of Oxidizing Materials

Intensification of fires and explosions – The usual source of oxygen for burning is air. Oxidizing materials can supply combustible substances with oxygen and support a fire even when air is not present.



C – Oxidizing

Oxidizing materials can:

- speed up the development of a fire and make it burn more intensely,
- cause substances to burn rapidly that do not normally burn readily in air, and
- cause combustible materials to burn spontaneously without the presence of an ignition source such as a spark or flame.

Combustion – Some oxidizing materials are themselves combustible.

Other hazards – oxidizing materials may also be compressed gases, corrosive, toxic, or highly reactive.

Working Safely with Oxidizing Materials

UNDERSTAND all of the hazards (e.g. health, corrosivity and reactivity) associated with the material, and how to use it safely.

CONSULT the Material Safety Data Sheet (MSDS) for specific information about incompatible materials before working with any oxidizing material.

KEEP away from incompatible and organic materials such as paper, wood, flammable and combustible materials, greases, waxes, cloth and many plastics.

PREVENT the release of oxidizing material into the workplace. Leaks and spills may be dangerous.

ENSURE that all containers are clearly labeled and undamaged.

KEEP containers tightly closed unless supplier instructs otherwise.

USE only the smallest quantity required.

REMOVE all sources of ignition.

USE only in well ventilated areas.

USE only containers that are recommended by the supplier, usually the shipping container.

PRACTICE good housekeeping by keeping areas clear of materials that burn.

REPORT leaks and/or spills to your supervisor immediately.

UNDERSTAND and **PRACTICE** emergency procedures so that you know what to do if it becomes necessary.

CLEAN UP spills and/or buildup of oxidizer promptly according to company procedures.

REMOVE contaminated clothing, footwear and watchbands as they can pose a severe fire hazard. Follow recommended procedures for decontamination or disposal.

X **DO NOT USE** corks or rubber stoppers to seal containers.

DO NOT RETURN any used or unused oxidizer to the original container. Trace amounts of a contaminant might start a dangerous reaction.

DO NOT CHIP or **GRIND** lumps of oxidizers to break them up, as they may be shock sensitive. If crystals have formed in containers, contact your supervisor about safe handling and disposal.

DO NOT SLIDE or **SKID** heavy metal drums across floors.

DO NOT REUSE empty containers as they may contain oxidizer residue.

DO NOT USE sawdust or other combustible materials to clean up spills of oxidizing materials.

***In the event of an emergency...
Warn people in the area and move to a safe
location to call for emergency help.***

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