Right to Know Hazardous Substance Fact Sheet

Emergency Responders Quick Reference

Common Name: **ARGON**

Synonyms: None
CAS No: 7440-37-1
Molecular Formula: Ar
RTK Substance No: 0151
Description: Odorless, tasteless, and colorless asphyxiant gas

HAZARD DATA

Hazard Rating	Firefighting	Reactivity
1 - Health **0 - Fire** **0 - Reactivity** **DOT#:** UN 1006 (Compressed) UN 1951 (Cryogenic) **ERG Guide #:** 121 **Hazard Class:** 2.2 (Nonflammable)	Extinguish fire using an agent suitable for type of surrounding fire. **Argon** itself does not burn. CONTAINERS MAY EXPLODE IN FIRE. Use water spray to keep fire-exposed containers cool.	**Argon** may react explosively with *liquid* NITROGEN. Keep temperatures below 125°F (52°C).

SPILL/LEAKS

Isolation Distance:

Spill: 100 meters (330 feet)

Fire: 800 meters (1/2 mile)

Stop flow of gas. If source of leak is a cylinder and the leak cannot be stopped in place, remove the leaking cylinder to a safe place in the open air, and repair leak or allow cylinder to empty.

Turn leaking cylinder with leak up to prevent escape of gas in liquid state.

Before entering a confined space where **Argon** is present, check to make sure sufficient *Oxygen* (19.5%) exists.

PHYSICAL PROPERTIES

Odor Threshold:	Odorless
Flash Point:	Noncombustible
Vapor Density:	1.38 (air = 1)
Vapor Pressure:	>760 mm Hg at 68°F (20°C)
Water Solubility:	Slightly soluble
Boiling Point:	-302°F (-186°C)
Melting Point:	-308°F (-189°C)
Molecular Weight:	39.9

EXPOSURE LIMITS

Argon decreases the amount of available *Oxygen*. Routinely measure *Oxygen* content to make sure it is at least 19.5% by volume.

The Protective Action Criteria values are:

PAC-1 = 65,000 ppm
PAC-2 = 230,000 ppm
PAC-3 = 400,000 ppm

PROTECTIVE EQUIPMENT

Gloves:	Insulated materials
Coveralls:	Turn Out Gear
Respirator:	< 19.5% *Oxygen* - SCBA

HEALTH EFFECTS

Eyes:	Irritation and burns
Skin:	Irritation and burns, contact with liquid causes frostbite
Inhalation:	Headache, rapid breathing, dizziness, confusion, loss of coordination and judgment, unconsciousness, coma and death

FIRST AID AND DECONTAMINATION

Remove the person from exposure.
Flush eyes with large amounts of water for at least 15 minutes. Remove contact lenses if worn. Seek medical attention.
Immerse affected part in warm water. Seek medical attention.
Begin artificial respiration if breathing has stopped and CPR if necessary.
Transfer promptly to a medical facility.