

International Chemical Safety Cards

CARBON MONOXIDE

ICSC: 0023

CARBON MONOXIDE Carbon oxide Carbonic oxide (cylinder) CO Molecular mass: 28.0 CAS # 630-08-0 RTECS # FG3500000 ICSC # 0023 UN # 1016 EC # 006-001-00-2			
TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Extremely flammable.	NO open flames, NO sparks, and NO smoking.	Shut off supply; if not possible and no risk to surroundings, let the fire burn itself out; in other cases extinguish with carbon dioxide, water spray, powder.
EXPLOSION	Gas/air mixtures are explosive.	Closed system, ventilation, explosion-proof electrical equipment and lighting. Use non-sparking handtools.	In case of fire: keep cylinder cool by spraying with water. Combat fire from a sheltered position.
EXPOSURE		AVOID EXPOSURE OF (PREGNANT) WOMEN!	IN ALL CASES CONSULT A DOCTOR!
• INHALATION	Confusion. Dizziness. Headache. Nausea. Unconsciousness. Weakness.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Artificial respiration if indicated. Refer for medical attention.
• SKIN			
• EYES			
• INGESTION			
SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING	
Evacuate danger area! Consult an expert! Ventilation (extra personal protection: self-contained breathing apparatus).	Fireproof. Cool.	F+ symbol T symbol R: 61-12-23-48/23 S: 53-45 Note: E	

		UN Hazard Class: 2.3 UN Subsidiary Risks: 2.1
SEE IMPORTANT INFORMATION ON BACK		
ICSC: 0023	Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities © IPCS CEC 1993	

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I M P O R T A N T D A T A	PHYSICAL STATE; APPEARANCE: ODOURLESS, TASTELESS, COLOURLESS COMPRESSED GAS.	ROUTES OF EXPOSURE: The substance can be absorbed into the body by inhalation.
	PHYSICAL DANGERS: The gas mixes well with air, explosive mixtures are easily formed. The gas penetrates easily through walls and ceilings.	INHALATION RISK: A harmful concentration of this gas in the air will be reached very quickly on loss of containment.
	CHEMICAL DANGERS: In the presence of finely dispersed metal powders the substance forms toxic and flammable carbonyls. May react vigorously with oxygen, acetylene, chlorine, fluorine, nitrous oxide.	EFFECTS OF SHORT-TERM EXPOSURE: The substance may cause effects on the blood, cardiovascular system and central nervous system. Exposure at high levels may result in lowering of consciousness and death. Medical observation is indicated.
	OCCUPATIONAL EXPOSURE LIMITS (OELs): TLV: 25 ppm; 29 mg/m ³ (as TWA) (ACGIH 1994-1995). MAK: 30 ppm; 33 mg/m ³ ; Pregnancy: B (harmful effect probable in spite of observance of MAK) (1993).	EFFECTS OF LONG-TERM OR REPEATED EXPOSURE: The substance may have effects on the nervous system and the cardiovascular system , resulting in neurological and cardiac disorders). Suspected to cause reproductive effects such as neurological problems, low birth weight, increased still births, and congenital heart problems.
	PHYSICAL PROPERTIES	Boiling point: -191°C Melting point: -205°C Solubility in water, ml/100 ml at 20°C: 2.3 Relative vapour density (air = 1): 0.97
ENVIRONMENTAL DATA		
NOTES		
Carbon monoxide is a product of incomplete combustion of coal, oil, wood. It is present in vehicle exhaust and tobacco smoke. Depending on the degree of exposure, periodic medical examination is indicated. No odour warning if toxic concentrations are present.		

Transport Emergency Card: TEC (R)-827
NFPA Code: H3; F4; R0

ADDITIONAL INFORMATION

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**IMPORTANT
LEGAL
NOTICE:**

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