



# **TOMES SYSTEM**

# **TOKSIKOLOŠKA BAZA PODATAKA**

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## **TOMES system**

- dio Healthcare business Thomson Reuters-a - baze podataka i softverska rješenja iz područja zdravstva
- pomaže u procjeni i primjeni rješenja pri izloženostima, kemijskim rasipanjima, eksplozijama...
- “user-friendly” baza podataka o industrijskim kemikalijama



## **TOMES system**

- Brz i jednostavan pristup informacijama:
  - iz područja medicine
  - o štetnosti
  - za sigurno rukovanje kemikalijama na radnom mjestu
- Služi za procjenu:
  - izloženosti,
  - brze reakcije u slučaju hitnosti i
  - usklađenosti sa zakonodavstvom
- Uključuje:
  - smjernice za liječenje kod akutne izloženosti, smjernice za liječenje kod dugotrajne izloženosti kao i utjecaj dugotrajne izloženosti kemikalijama na zdravlje pojedinca
  - postupke pri evakuaciji i
  - informacije o uklanjanju kemikalija i zaštitnim sredstvima

➤ **DAJE KLJUČNE PODATKE ZA ODRŽAVANJE I VOĐENJE SIGURNIH I ZDRAVIH RADNIH PROSTORA/MJESTA**

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### Editorial Update: Swine Flu

**Main Keyword Search:**  
Search Drug, Toxicology, Disease, and Labs databases for:

Search summary documents only.

Find all keywords that:  Exactly Match *End in an asterisk (diab\*, aceta\*) for Begin With search*  
 Begin With



## *Dva izvora informacija / dokumenta:*

### **MEDITEXT** - pomoć pri:

- procjeni i liječenju akutne izloženosti industrijskim kemikalijama
- izvješivanju o potencijalnim neželjenim učincima na zdravlje u slučaju dugotrajne izloženosti

### • **HAZARDTEXT**

- prikazuje podatke potrebne za početni (inicijalni) odgovor na incidente kao što su rasipanja (prskanja), istjecanja i požari koji uključuju opasne materijale
- pruža podatke o toksičnosti, utjecaju na okoliš i onečišćenju
- daje smjernice za evakuaciju, uklanjanje kemikalija i osobnu zaštitu



## *MEDITEXT dokument uključuje sljedeće dijelove:*

- *osvrt*
- *sadržane supstance i sinonime*
- *kliničke posljedice izloženosti (popisane po organskim sustavima)*
- *medicinski nadzor/laboratorijsku procjenu*
- *izvješća o dosadašnjim slučajevima*
- *postupanje s izloženim pojedincima (organizirano prema načinu (putu) izloženosti)*
- *raspon toksičnosti*
- *kinetika*
- *farmakologija/toksikologija*
- *standardi i označavanja*
- *fizikalno-kemijski parametri*
- *reference*

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## MEDITEXT® Medical Managements

### COBALT

**COBALT**  
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#### 0.0 OVERVIEW

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#### 0.1 LIFE SUPPORT

A) This overview assumes that basic life support measures have been instituted.

#### 0.2 CLINICAL EFFECTS

##### 0.2.1 SUMMARY OF EXPOSURE

###### 0.2.1.1 ACUTE EXPOSURE

- A) The classic toxidrome of chronic soluble **cobalt** poisoning is the tetrad of goiter, polycythemia, cardiomyopathy, and metabolic acidosis.
- B) INHALATION - Occupational inhalation exposure to metallic **cobalt** or **cobalt** alloys, usually produces cough, dyspnea, wheezing, asthma, or interstitial fibrosis ("hard metal disease"). Fume exposure can cause conjunctivitis and rhinitis.
- C) DERMAL - "Cobalt itch" or "carboly-itch" (an allergic erythematous papular eruption) may occur.
- D) ORAL - "Beer drinker's cardiomyopathy" with frequent pericardial effusions have been described. Ingestion of **cobalt** can cause nausea, vomiting, and diarrhea. Ingestion of **cobalt** causes stimulation of the bone marrow and blood-forming components, resulting in polycythemia.
- E) PARENTERAL - Rhabdomyosarcomas have been found in rats following intramuscular injections.
- F) This management does not deal with potential clinical effects or treatment of radiation injury from radioactive **cobalt** isotopes. IF EXPOSURE TO RADIOACTIVE ISOTOPES OF COBALT HAS OCCURRED - refer to RADIATION MANAGEMENT for further information.

###### 0.2.1.2 CHRONIC EXPOSURE

A) Polycythemia, hematuria, and goiter have been described following chronic exposure.

##### 0.2.5 CARDIOVASCULAR

###### 0.2.5.1 ACUTE EXPOSURE

A) Cardiomyopathy is commonly reported as part of the **cobalt** toxidrome.

##### 0.2.6 RESPIRATORY

###### 0.2.6.1 ACUTE EXPOSURE

- A) An interstitial fibrotic pulmonary process has been described among "hard metal" workers and diamond polishers.
- B) Wheezing, cough, and shortness of breath may occur.

##### 0.2.8 GASTROINTESTINAL

###### 0.2.8.1 ACUTE EXPOSURE

A) Ingestion or inhalation of **cobalt** causes nausea, vomiting, diarrhea, and colicky abdominal pain.

##### 0.2.11 ACID-BASE

###### 0.2.11.1 ACUTE EXPOSURE

A) Metabolic acidosis has been reported as part of the **cobalt** toxidrome.

##### 0.2.13 HEMATOLOGIC

###### 0.2.13.1 ACUTE EXPOSURE

A) Polycythemia is commonly reported as part of the **cobalt** toxidrome.

##### 0.2.16 ENDOCRINE

###### 0.2.16.1 ACUTE EXPOSURE

A) Goiter is commonly seen as part of the **cobalt** toxidrome.

##### 0.2.20 REPRODUCTIVE HAZARDS

Done



## *HAZARDTEXT - dijelovi:*

- *Sadržane supstance i sinonimi*
- *Zdravstveni učinci kemikalije na zdravlje*
- *Liječenje i skrb*
- *Raspon toksičnosti*
- Podaci o štetnosti i sigurnom rukovanju (uključujući i smjernice za uklanjanje kemikalije i osobnu zaštitu)
- *Reference*



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## HAZARDTEXT® Hazard Response Managements

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### COBALT

#### 1.0 IDENTIFICATION

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#### 1.1 SYNONYMS

- 1) AQUACAT
- 2) COBALT
- 3) COBALT-59
- 4) KOBALT (German, Polish)
- 5) SUPER COBALT

#### 1.2 IDENTIFIERS

- 1.2.1 CAS REGISTRY NUMBER
  - A) 7440-48-4 (Cobalt)
- 1.2.2 NIOSH/RTECS NUMBER
  - A) GF 8750000
- 1.2.3 UN/NA NUMBER
  - A) Editor's Note: This material is not listed in the Emergency Response Guidebook. Based on the material's physical and chemical properties, toxicity, or chemical group, a guide has been assigned. For additional technical information, contact one of the emergency response telephone numbers listed under Public Safety Measures.
- 1.2.6 MOLECULAR FORMULA
  - A) Co
- 1.2.7 ERG GUIDE NUMBER
  - A) 135 - SUBSTANCES - SPONTANEOUSLY COMBUSTIBLE

#### 1.3 SYNONYM REFERENCE

- A) (HSDB , 2000; Lewis, 1996; RTECS , 2000)

#### 1.4 USES/FORMS/SOURCES

- A) USES
  - 1) Cobalt is used in the manufacture of extremely hard steel and cutting tools (Lewis, 1998). It is also used in cemented carbide cutting tools, jet engines, as a coordination and complexing agent (Ashford, 1994; Lewis, 1997) ITI, 1994; (Lewis, 1998). Together with nickel, aluminum, copper, beryllium, chromium and molybdenum, cobalt is utilized in the electrical, automobile, aircraft and other industries (Sittig, 1991).
  - 2) Cobalt is used in the manufacture of chemicals (cobalt salts); in alloys; cobalt steels for permanent magnets (in telephones, magnetic tape, microphones, speakers, computers, and motors) and for soft magnets and high-speed tool steels; in nuclear technology; and as oxidizing agent (ACGIH, 1996; (Budavari, 1996; ITI, 1995; Lewis, 1997). This metal is a constituent of stellite alloys (used for extrusion dies, turbine blades, and valve seats), of super alloys, and of magnetic cobalt-rare earth alloys (Ashford, 1994).



## TOMES SYSTEM - TOKSIKOLOŠKA BAZA PODATAKA

- pristup bazi - samo pretpla eni korisnici
- Hrvatski zavod za zaštitu zdravlja i sigurnost na radu (HZZZSR) pretpla eni je korisnik TOMES baze podataka
- cilj HZZZSR-a - omogućiti dostupnost podacima iz baze što većem broju zainteresiranih strana o kroničnim učincima dugotrajne izloženosti niskim koncentracijama štetnih kemijskih tvari
- predložak će biti dostupan na <http://www.hzzzs.hr/>



# Hvala na pažnji

Hrvatski zavod za zaštitu zdravlja i sigurnost na radu  
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